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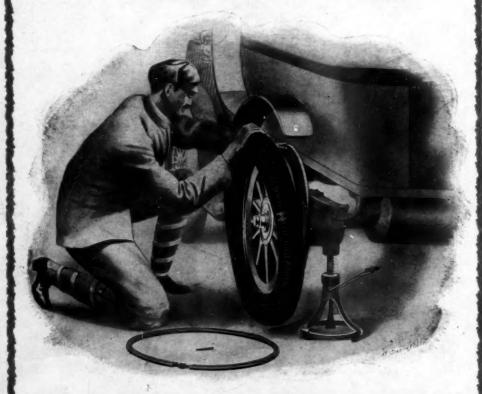
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#### The

## Automobile Magazine

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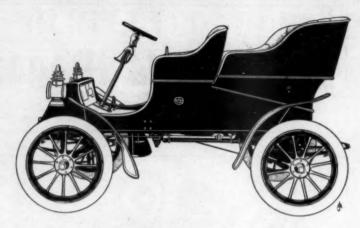
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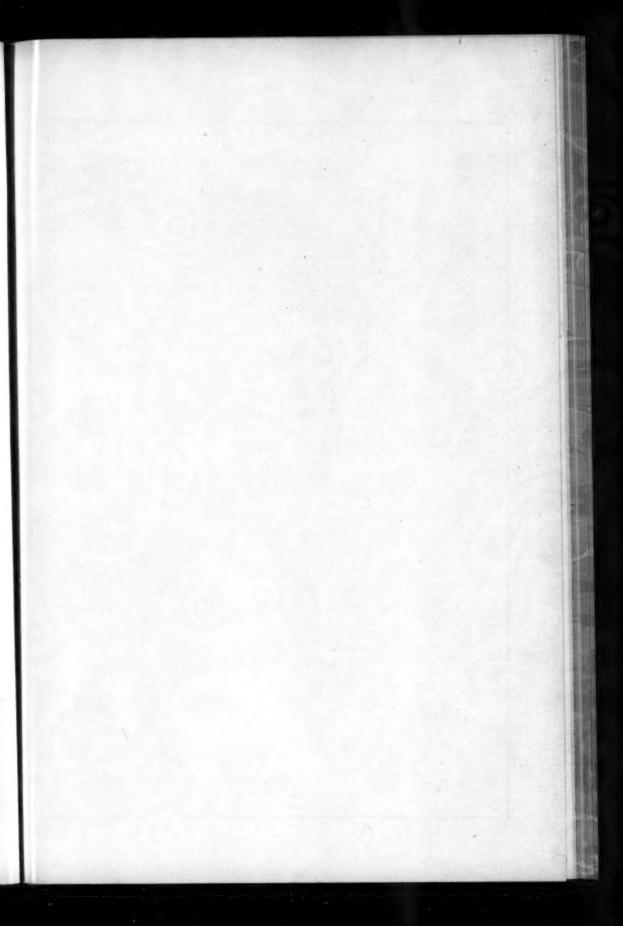
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### AUTOMOBILE MAGAZINE

Vol. VI

OCTOBER, 1904

No. 10

#### Seventeen Hundred Miles of Sunshine and Shower

By Dr. E. B. Brown

WINTER tour of Southern California, in a touring car just as it left the factory-canopy top, side baskets, and full lamp equipment, carrying four people and all their baggage was what I understood. Ours was the first car to attempt such a tour, and the only one that has left San Francisco to go as far as Los Angeles and return by its own power. This I accomplished with no professional assistant of any kind. My car was a model "D" White and I had used it in Portland, Oregon, for three days in the snow and mud and then on February 10 had ordered it shipped to San Francisco. Orders are not always carried out, however, and in this case the boat refused to take the automobile, as it was already overloaded with other freight, so the car was shipped by rail, and was held in the mountains for ten days by a landslide, arriving in San Francisco after having been fifteen days on the way, during which time the telephone and telegraph wires were kept busy trying to locate the car. To we who awaited the coming of the car the time seemed much longer than it really was, since Mrs. Brown was only just recovering from a very serious railroad accident and not being able to walk-we could not get around without the car. In fact, it was for Mrs. Brown's health that the trip was undertaken-as the doctor had said

sunshine was the only cure for her and by the way we had a long hard search to find any of that even.

But all things come to those who wait, even delayed autocars, and at last we were notified that our precious steamer was at the depot, and you may be sure we wasted little time in starting on a trip through Golden Gate Park, out Nineteenth avenue, over Ingleside Drive to the beautiful Ocean Boulevard and the Cliff House. These were the first good roads, and you can better imagine how we enjoyed them, if any of your readers have even been in Oregon and sampled the roads there even in the summer time. Later on. however we found it rained about as much in San Francisco as it did in Portland, so we hastened our preparations for our journey south. To be candid, I must confess I rather dreaded the trip, as the car was new and the country we were to travel through a terra incognita. Although I had owned a steam vehicle for two years previous, nevertheless it was quite an undertaking to start with an untried car on such a trip practically alone and with two women. We left San Francisco on Thursday at 11 o'clock on what is called the Creek route, by ferry to Oakland, arriving at Oakland in time for lunch-leaving for San Jose, fifty miles distant, at 1.30. The roads were



WHEN ROADS AND WEATHER ALIKE WERE PERFECT

perfect and when we arrived at the beautiful little city of San Jose, Mrs. Brown decided she could ride all night if the roads would last. On this trip we saw for the first time oranges growing, and Master Hoyt had the satisfaction of picking his first one from the tree.

At San Jose we remained two weeks, taking short trips each day to the surrounding country, it being well worth anyone's time to go out through the orchards, which completely filled the valley. This is called the Garden City of California, and we decided it was rightly named, since we saw nothing to compare with it during our entire trip. A nice afternoon's ride is by way of Santa Clara past Mrs. Remmington's

home and out to Saratoga, crossing over to Los Gatos, and back to San Jose over the Creek route. To enable you to do all this the San Joseans have changed the course of a small stream, and built a beautiful road along what was once the bed of the stream. It is delightful to drive over this and follow its meanderings among the beautiful homes which line both sides of the banks. Another picturesque route is the Alumn Rock Springs through the Eucalyptus Grove to the Golf Links back through the valley.

During all the time we were enjoying these delightful rides we had been listening to stories of San Juan Hill, a mountain that we would have to cross on our way to Monterey. From all accounts it seemed this mountain was known to the automobilists for miles around, and each had his or her story to tell of what a trip across it meant. Finally we concluded, like we did many times later on, that the best way was to try it, and find out for ourselves. In planning this, however, we had not calculated on a rainy day, so we ran into

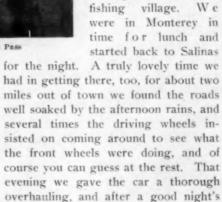
the wettest specimen of rainy day you ever saw; we stopped at the town of San Juan, just at the foot of the hill, and there it was necessary to remain for two days until that rain had rained itself out. Our stay was not altogether an unpleasant one, since we were well taken care of at the Plaza Hotel, which, though it was a very ancient adobe building, was about the cleanest place we found on the trip. While at San Juan we visited the old Mission - founded , in 1797-and found it very interesting. They are still holding services in the building and using the same pulpit where the priest endeavored to teach the Indians the

Christian religion, speaking in nine different dialects to accomplish it. We visited other missions but found them all to be modern and well kept and of interest to any one.

With the driving wheels of the car roped we started at 10:30 to climb the much-dreaded San Juan, and, near the summit found our troubles in the way of a very bad bog, and saw where a few days before Mrs. Baird and her auto car were stuck for five hours. We, however, were more fortunate, since we went safely over though we came near skidding over the edge. It is a pleasant ride down the west side, and the view from the summit is superb; too much so for any camera to do it justice.

We stopped at Salinas, a very pretty little place, for lunch, and from there

on it was a beautiful drive of twenty miles to Del Monte and Monterey. We remained over night at the Hotel El Carmello and Pacific Grove, and on the following day secured a pass which permitted us to go over the famous seventeen mile drive. I imagine this is beautiful under favorable conditions, but when we traversed it it was muddy and the wind was blowing about sixty miles per hour. Despite these drawbacks we succeeded in making the roundsgathering some beautiful abaloney shells, and visiting the Chinese fishing village. We were in Monterey in time for lunch and started back to Salinas





Gaviota Pass

rest the morning found us in excellent humor for our start on a run of about 500 miles.

It was not a very promising outlook for weather which confronted us, but the roads for fifty miles were through a valley and practically level-still there are about four miles that are indelibly impressed on our minds as being excellent examples of what roads should not be. Most of this part of the country is owned by cattle companies, and is used for grazing only, which means that farm houses are few and very far between. The companies have fenced in a few thousand acres here and there, but evidently they didn't think it necessary to make any

roads, but let the people who had to team over them make the best of what they could find. About every twenty feet of this awful way a furrow had been left from ploughing and I thought several times we would need a new set of springs, but in the end we got

through some way.

King City soon appeared in the distance, and it was necessary for us to cross the river here to the town for gasolene, after procuring which we were compelled to retrace our tracks across the bridge and make a detour of seventy miles by way of Jolon, though the direct route is only thirty-five miles. We arrived at Jolon at 6 o'clock and caused considerable amusement to the natives by our trying to pronounce some of their Spanish names, that of the town for example being pronounced as if it was spelled Holon. Here we found another ancient adobe hotel with a proprietor very kind and accommodating, he serving us fried chicken and hot biscuits "just like your mother makes." We reached Bradley early in the morning and were again on the line



Up the Famous San Juan Hill

of the railroad, but followed it for only one mile, leaving it to make a twenty mile detour for the purpose of reaching San Miguel. We expected to get lunch here, but as there were no restaurants we were advised to proceed to the next town, Paso Robles, which is nine miles beyond. We reached Paso Robles early in the afternoon and found it to be a very pretty little place. was a very pretentious hotel, but we could get nothing to eat as the hotel would not serve meals until 5:30, and there were no restaurants. As we did not care to waste the better part of the day waiting for something to eat, we bought some crackers and cheese and prepared to make them answer for our dinner, but as Master Hoyt refused to eat because there were so many spectators, we had to move out to the edge of town to get him to eat. By this time rain, or what we would call an Oregon mist, was falling. It was over forty miles of very bad mountain road we would have to travel before we could reach San Luis Obispo, our destination for the day. We had

not covered but a few of these forty before we were compelled to lower the glass front and put down the curtains on the car, as the mist had developed into a downpour which lasted all night. We had concluded to stop at Santa Margarita, just at the foot of the mountain, but on reaching there found the only hotel was run by Mexicans, four of the five men present on our arrival being drunk. Mrs. Brown decided she would ride all night rather than stop in such a place, so I roped the wheels, lighted the lamps, and started on over one of the worst mountain roads of our trip. It was either do this or turn back, and as our motto was onward we were soon laboring on our way up the mountain. The road follows the railroad until the latter proceeds to bury itself in a tunnel, which is the longest on the road. The wagon road on which we traveled is straight on over the mountains. We had not gone far when I heard the ropes which I had wound around the wheels striking the fenders and upon an examination I discovered that they had worn through. There



Alumn Rock Springs

was nothing else to do but put on new ropes, which did not last as long as the first had done. By this time I was saturated in water and completely covered with mud. Becoming disgusted with the whole performance I took off the ropes and continued on our way without them. At one place near the



Mission at Santa Barbara

summit we had to make several attempts before I could find a place for the wheels to take hold, but in a short time we were on the down grade, whereupon it did not take long to reach the valley below. All things considered we made excellent time, as it was 7:15 when we started, and when we arrived at San Luis Obispo it was but 8:30, just 111 miles having been covered in the time intervening. You may be sure we were mighty glad to see the electric lights of a city once more and to find in it a nice comfortable hotel to spend the night in. It was here that we met a Mr. Wright, who was quite an auto enthusiast, he having built a motor carriage for himself which would put to shame many of the more pretentious ones turned out by some of our big factories. Mr. Wright supplied us with some very valuable information, having toured over most of the country I was going over some time before. We remained



At the Entrance to Casitas Pass

in San Luis Obispo over Sunday, leaving there on Monday morning over roads in extremely bad condition after the storm.

At Pismo, a beautiful little place about fifteen miles out, you come to the ocean, and if you have come direct from San Francisco this will be your first sight of the Pacific. From here to Los Olivos, where we stopped for the night, there are several good stretches of road and some very pretty farms. But do not attempt to get gasolene there at 60 cents per gallon when Santa Ynez is only five miles beyond, where gasolene can be procured at \$1.50 per can.

Tuesday morning found us on the road bright and early, as heretofore it had been 9 to 10 o'clock before we could get started. No sooner were we under way than it commenced another one of those drizzly rains and we were warned that it was inadvisable to start, because now we were in the adobe country. While there were three roads to choose, I do not believe any of you will blame me for taking what at that time appeared to be the only available one over the Gaviota Pass, which takes you again about thirty miles off the direct route, as it is only thirty-five miles to Santa Barbara on the stage road, but the country through which the direct route passes has a n anti-automobile law of unusual hayseed severity, so we were barred from that. The next choice was to go directly over the mountain, seven miles up and ten down the other side, to the beach near Naples, and the third and the last, or Gaviota Pass route, was our choice, with

its forty-five of its sixty miles soft adobe. In good weather twenty miles of this road is very beautiful and especially that portion of it going through the Gaviota Pass, where it is only wide enough for an ordinary bridge to span the stream, while the high cliffs running up on either side make quite an imposing picture. Owing, however, to the gloomy dark day we went through it was impossible to use the camera, while the wind blowing in from the ocean at about eighty miles an hour made travel anything but pleasant. Just as we had rounded a curve and climbed quite a steep ascent to the coast it seemed as though the wind would blow the ocean out of its bed. (In the midst of it all I noticed the steam was going down, and upon investigating found the wind had blown out the flame. After several unsuccessful attempts to relight this, and the employment of some not very nice language, and the thinking of a lot more which I dared not give expression to, I at last got it lighted.) Then for the first and only time on our entire trip we retraced our tracks for about a mile to the only building in Gaviota, hotel and store combined, where we put "Samantha"-the name we had given to our vehicle-in a car

barn out of the wind and rain. Goodness knows it needed cover, for it was so covered with mud you could not see a spoke in any of the wheels, and to give you some idea of the consistency of the kind of mud it was I had to stop twice in walking up to the house to get the stuff off of my feet, as they would get so heavy with it that I could hardly pick them up. Thus

were we rewarded for having dared to make an early start, since it was only 10 o'clock, and here we were compelled to remain until 2 P. M. the following day when the wind, having quieted down and the sun come out, we decided to push on and try to make Santa Barbara, thirty-six miles away. But we still did not appreciate what adobe road conditions were or we would have waited another day. For the benefit of any who may essay this trip, whatever you do, do not attempt to travel over the roads just after a storm, as there are not less than four or five canyons to cross to every one of the twenty-two miles which was registered by our odemeter. We reached Naples at 6:30, then, as it was getting dark, we stopped



Through Conejo Pass



In West Lake Park, Los Angeles

for the night, though should we ever make this trip again I believe I would prefer to go the rest of the sixteen miles to Santa Barbara, as these are two things I think even automobile tourists are entitled to in this world, and there are good wholesome food and plenty of it, and last, but not least, a comfortable, clean bed at night to rest in. I soon learned to look out for those little towns where they take it for granted that anyone who owns an automobile has money which is of little use to them. Probably the holders of such opinions are right, but, even so, I object to sitting side by side at a table with a traveling man, eating the same food as he does, and then being called upon to pay \$1 for it all when he gets off for 50 cents, and the natives for 25 cents. This kind of discrimination we experienced quite often. An hour on the road after leaving Naples found us in Santa Barbara, and we have always had a warm spot in our hearts for that beautiful little city ever since.

Here we were again held up by rain, although the time was well taken up in a visit to the Mission, and a very pleasant afternoon at the country club and beach. While we were doing all of this we concluded to have our trusty friend cleaned of some of the adobe,



Hotel at Jolon, a Fair Type of Our Stopping Places

so on Friday I gave the boys at the store orders to proceed with the cleaning. In the afternoon I went back to see what progress they were making, and to give you some idea of the condition of the car one of the boys remarked as I went in: "Well, we have washed off enough to be able to see it is an automobile."

Saturday morning looked calm and peaceful enough for an early start, but it was 9 o'clock when we began our last day's trip south. As we went on our way we were astonished to see them pumping oil out of the ocean at Summerland. At Carpentara we left the beach and went inland over the Casitas Pass, which means two very nice grades to climb, and two streams to ford which, though narrow, happened to be unusually deep just after the storm. We thought it was all off when we dropped into the first stream, but I gave Samantha full power and she drove through, though water was over the front lamps. The mystery of it all is why it did not put out the pilot light. We tried to get a picture of this place on the return, but it did not come out very well on account of the poor light we had.

One of the very first things I learned on this tour was that it isn't very satisfactory to ask the natives in this part of the country, any more than in any other, how far it is to the next town. We were told by a farmer in the mountains that we were fifteen miles from Ventura. I was not watching the odometer through here, but imagine we certainly had left him ten miles behind and we were still in the mountains

when we overtook a Mexican and he informed us we had still seventeen miles to go. Deciding we were off the road or going backward we began to worry a bit, but in a short time we reached the valley and a beautiful level road. Not caring particularly where it led us I could not resist the temptation and let Samantha give full vent to her pent-up feelings, and anyone who drives a White will know what this means.

In the distance appeared a team which was going in the same direction as ourselves, and just as we drew up abreast of it a large white hound leisurely trotted out from in front of the horses in time to be lifted in the air by our front wheels. I can't to this day understand why he was not thrown under the machine, but he lit about twenty feet in front of them and going at the speed we were I did not dare to turn the car, so Mr. Hound again received the benefit of both wheels. We slowed down and I looked back to see the result, but as the farmer was driving on and we didn't think it necessary for us to go back, we kept straight on into Ventura, where we stopped for lunch and filled up our tanks with gasolene, as this was the last chance to procure fuel this side of Los Angeles. We were told that it was seventy-five miles to our

destination over roads which were very good. About twenty miles out from Ventura we met, coming from Los Angeles, our first automobile, and this is the only machine we saw on the trip. The roads through this section were very good, especially the new ones over the Conejo Pass, which were the best we found on our entire trip, even though they served only to bring us out at Calabasas Pass, which is rather a rough, desolate country. After leaving the pass we came to another level, desolate strip of about twenty miles, most of which was covered with wild poppies, except a dried-up river bed which was lined with a rank growth of cactus.

Before reaching Hollywood, a beautiful suburb of Los Angeles, we overtook a young couple in a buggy and—as Samantha has a bad habit of sneaking up on such occasions—we noticed the couple were very much interested in each other, their mutual interest being emphasized with a hug and kiss to our great amusement. As witnessing this was becoming rather embarassing for all of us I blew the horn twice before I could attract their attention, and when I succeeded in doing this finally you can imagine their surprise on looking around.

But at last we had reached what I had commenced to long for, which was where our touring guide said "All roads

lead to Los Angeles," and just as the clock struck six we drove in on the business street and were soon tucked away in the Hotel Angelus, where we soon found many friends and acquaintances from Portland. The next two weeks were pleasantly occupied in side trips to the sur-

rounding country, and an ever-memorable trip to Catalina Islands, where a ride in the glass-bottom boats is well worth the trip across the water—sea sickness thrown in.

We returned from this voyage to find that Samantha had been well taken care of in our absence, having been cleaned, oiled and again made ready for the road. To celebrate this we take our friends for a trip to Pasadena, a very beautiful place, where we enjoyed the ride up Orange avenue on Millionaire's Row, so-called because most of the elegant homes are owned and occupied during the winter by well-known financiers of the world. There are some very pretty drives around this city, so we spent the afternoon very pleasantly, returning to Los Angeles in the evening. Our friends-who had never experienced the pleasures of automobiling before-considered they had the time of their lives and declared that it wouldn't be long before they had a car of their own.

At last we had found the sunshine the whole trip had been undertaken for, but after two weeks of it concluded that it was a bit more than we desired, so on Saturday we started north to retrace our tracks to San Francisco. The tour home was delightful and was void of anything out of the usual, as we came home over practically the same route



On the Beach at Avalon



Like a Scene in a Theatre.

we had journeved out on and knew what to avoid. Samantha's behavior was something marvelous, with one exception. We decided to make a short cut across the mountains above Naples over a new road and in a very bad condition. There were ten long weary miles of this from the summit to the beach and seven miles down on the east side, and we started to climb the first of the ten miles about 11 o'clock. Everything was going nicely and we had reached a point about two miles from the summit when the water diaphragm commenced to leak. From that moment I had the pleasure of hand pumping the rest of the way and the only thing which enabled me to do this was the knowledge that on the other side of the mountain there was some good cold beer. Imagine how I felt then upon reaching Santa Ynez to find they had no ice-well, I am not so fond of beer as I might be and excuse me from drinking it at any time when it is warm. It took two hours' hard work to get an extra diaphragm, which fortunately we had with us, in place. This done we were soon on the road and spent the next day with our friend, Mr. Potts, at the Zaca Ranch, where, while we enjoyed the rest, Master Hoyt had the pleasure of a ride on the cow ponies under the able tutelage of the cow boys. We left the next day at noon, and at 3 o'clock arrived once more at the Oakland Pier. Although it was a grand trip we could not help feeling elated to know that we were again in San Francisco. That we had made the trip without an accident to ourselves or the machine, and had not been the

cause of an accident or trouble to anyone else, was also a source for considerable self-congratulation. After a week's sojourn in and around the coast metropolis we drove the car down to the steamer and, at the end of three days of sea sickness, we were once again at home in Portland.

Mrs. Brown's recovery has been the marvel of all her friends, and, to use her expression, Samantha has done it all. This recovery alone has more than paid us for what few hardships we had to endure in gaining it, and now as we sit in our comfortable rooms with peace and plenty we look back over our trip as the grandest event of our lives and wish it was but just beginning.

A farewell word for Samantha, the best and truest friend a man ever had on a tour. With the exception of the broken diaphragm the car has never been touched by a repair man only to be cleaned and oiled, and this, I regret to admit, was not done as often as it should have been. What is more remarkable still is that we have traveled 2,000 miles without a tire puncture, which I attribute solely to good luck rather than superior judgment. engines up to date have never been taken apart or tightened up for adjustment, despite the 1,700 miles they drove us in our tour of California.

#### Simplicity, the Crying Need

By Reginald Vernam

THERE are persons who delight in mechanism, to whom everything mechanical is as easily understood as the alphabet. There are others, however, who seem so constructed by nature as to be wholly incapable of understanding the most elementary mechanical principles. Between these extremes of humanity is the average mortal who "likes a bit of engineering so long as it does not go too deep."

This last class forms the large majority of people, and, although the construction of motor cars does not really "go too deep," there are indeed a very great number of people who hesitate long before taking up motoring, from no other reason than the fear that they will not be able to understand the mechanism of the car sufficiently well to drive it successfully. To this class belong the greater number of women.

It has been urged, indeed, that the automobile will never be universally popular until its operation is as easy as is the control of a docile horse by reins and whip.

For business vehicles also, which must be trusted to the inexpert, simplicity of control is an absolute essential. The ordinary driver could not be expected to cope successfully with the intricate lever and pedal system of complex high powered cars.

Now the solution of the difficulty and the ultimate popularizing of the automobile would seem to be absolutely a question of simplicity of control. But, broadly speaking, simplicity of control is in the inverse ratio of simplicity of construction. When you drop a penny into a slot, and a series of results occur, the results are achieved by a more or less complicated mechanism, and the more effective the results, the more

complicated is the mechanism giving rise to them. And(nowthis is the moral), the more complicated the mechanism, the more likely you are to find it out of order, and the dropping of your penny to be followed by blank and disappointing inactivity.

It is precisely the same with regard to automobiles. Simplicity of operation can, at our present stage of knowledge, be attained only by means of complexity of internal mechanism. He, therefore (or she), who lacks mechanical understanding does not solve the difficult by investing in a car over-simple of operation, for not only is the complex mechanism actuating such most prone to go agley, but when it once gets so it is very difficult to reduce to order.

Eventually, no doubt, the desideratum of control as simple as that of a docile horse will be obtained in an automobile, but that simplicity will be the outcome of a corresponding simplicity of design, a perfection to be achieved only by ringing the changes on complexity till the chord of true simplicity is all at once found.

Till then it is good advice to the hesitating majority to pluck up courage and to boldly tackle the levers and pedals and handles on the surface rather than to demand an exterior simplicity, which can only be attained by hidden complexities.

No matter how excellent your vehicle, nor how careful your handling of it may be, it will at times get out of working order. Then, in overhauling and righting it, you will be thankful that the multiplicity of exterior devices which frightened you at first is more than compensated for by the simplicity of internal arrangements, and the ease with which any little fault can be reme-

died, since after all, when you come to grapple with them, taking each singly and studying and practising its effects, you will find your array of devices become almost as easy of manipulation as the keyboard of a piano.

At the most, you will probably have eight different devices of which to learn the use and ready handling, three small handles or keys—the throttle, the spark switch and the ignition time; two hand levers—operating the hub brake and the change gear; three pedals—controlling the clutch, the accelerator and the brake.

When approached with ordinary intelligence the array soon ceases to be formidable, and is found to require no very deep knowledge of mechanism for the mastering. Indeed, it is surprising how rapidly the knowledge becomes automatic, the foot and hand after a time seeming instinctively to make for the right lever at the right moment.

Of course, there is all the difference in the world between driving and driving—as there is between playing the piano and playing the piano. But as one with little ear for music can learn to render creditably, so the average man and woman, not born mechanicians, can learn to operate a motor car easily, and with profit and pleasure.

#### To Keep Tires Constantly Inflated

From across the water comes an air compressing device for the inflation of automobile tires while the vehicle is in motion. On the inner end of each hub is an annular cup, inclosed by, a stationary head which forms an air chamber. Into the annular cup a ring is screwed, which holds the head firmly in its place. A packing ring is interposed to make the chamber quite airtight. A tube leads from the casing to the valve of the tire. Connected by pipes to each of these hub chambers is

an air compressing device, the pipes entering the chambers through the stationary heads. A two-way valve is provided, so that the driver may direct the air from the compressor into the tire or permit it to escape into the atmosphere at will.

#### To Make a Plug Clean Itself

With a multiple-cylinder motor, it is easy to clear a sooty ignition plug without removing it from the cylinder, if the following plan is followed: Detach the high tension wire from the misbehaving plug, open the compression tap of its cylinder, and run the engine on the other cylinders. Then hold the terminal of the detached wire, being very careful not to touch the metal part with the fingers, a very short distance off the end of the plug, so that the spark jumps to the latter. At first the cylinder will be heard to be missing, but very quickly the reverse will be the case, and the dirty plug will be found to have cleared itself. Then switch off, shut your compression tap, attach your wire again, start up, and continue on your way rejoicing.

#### Rural Evidence

"What did you pay for your runabout?"

"Seventeen hundred and fifty dollars."

"Why, I've bought a rattling one for less than one-quarter of that."

"Yes, I've heard it."

#### A Modern Instance

Mr. Dearborn—How are you getting along with your new wife?

Mr. Wabash—Oh there's trouble already.

"What's wrong?"

"Why she insists on having a new touring car, and I think the runabout my last wife had is good enough.

#### Inspecting Cylinder Suspicions

By Rene Davidson

be tested for its compression, because loss of compression means loss of power. In order to make this test the starting handle should be turned slowly, while it is carefully noted whether the resistance which results is the same for each cylinder. If this is not so, then it is certain that there is a

ing of the joints with a wrench. Where copper and asbestos washers are used in making the joint, however, it will often be found more satisfactory to renew them; and the careful man will remember that the nuts which secure almost any form of joint should always be gone over again after the motor has been running a few minutes, since it will us-



RETREAT OR ADVANCE?

leak sornewhere in the compression space.

To discover just where this is a little soapy water should be brushed round the joints of the valve covers, sparking plugs, compression taps, or any other connection leading to the cylinders, and then, on again turning the starting handle, bubbles will show themselves wherever the leak is.

The remedy in most cases will be nothing more serious than the tightenually be found that as soon as everything is hot the joints can be squeezed up much tighter. Never neglect this precaution, as it will often prevent trouble later on. Should the joints be what are known as "faced," i. e., metal to metal, it will be wise to grind the two faces together with a little flour emery and oil.

If the soap bubble test fails to locate any leakage at the joints the induction and exhaust valves should be inspected, as one of them may be where the trouble is. To find out if this is so, place a thin deposit of flour emery and oil on the face of the valve, and then after replacing the valve give it a few turns on its seating with a screwdriver or other convenient tool. All the emery paste should afterwards be carefully rubbed off, and an inspection of the valve and valve seating will at once show whether it is in good condition, because, if it is, the faces will be clean and bright all over, whereas a leak will be indicated by a dark patch showing that the two faces did not touch one another. remedy this a further grinding-in will be necessary until the valve faces are bright all over. During the process of grinding, the valve should be frequently lifted off the valve seating and given a slight turn before being replaced. Great care must be observed not to apply too much emery at once, as doing so may result in some of it finding its way into the cylinders.

If neither of the above causes have contributed towards the loss of compression, it may be that the grooves into which the piston rings fit are filled with burnt or gummy lubricating oil, which has resulted in the rings losing their elasticity. To get over this difficulty pour about a tablespoonful of kerosene into the cylinder. This will soften any deposit of the kind and free the rings. Should the fault be in none of the foregoing then maybe the open ends of the piston rings have worked round so that they are underneath one another, instead of being, as they should be, equidistantly spaced on the piston. In this event the cylinders will have to be removed and the rings put back in their correct relation to one another. No motor is the worse for having its cylinders washed out with kerosene, and this may be done with advantage after every 300 miles, or oftener if the car is not used much. The best time to do it is immediately after a day's run, when the motor is hot.

#### Some Plug Plagues

A frequent cause of breakage in the porcelain of a sparking plug is the excessive tensioning up of the plug holding the porcelain in position. This should only be screwed up-if one may use the expression-"hand tight," it having been found from experience that a plug so treated is practically everlasting. A frequent cause of a short circuiting in wet or foggy weather is caused by damp becoming deposited between the fly nut holding the hightension wire across the porcelain of the plug, and so to the frame. This may be avoided by winding insulating tape from the porcelain of the plug to the insulating rubber of the high-tension wire, then treating the cross wire terminal on the contact-breaker in a similar fashion.

#### A Laconic Lilt

Scorcher man. Out for spin-New machine Slick as sin. Went ten miles Like a streak, To a bridge 'Cross a creek. Mule on span Wouldn't budge: Scorcher swore-Said: "Oh, fudge! See me knock Mule to bits: Just watch me Give him fits!" Mule's rear hoofs Met the shock, Schorcher sailed Half a block. Mule's here vet: Scorcher's flown-O'er his head Nice white stone.

#### Making and Using a Pneumatic

By Fenton McFarlan

OST of us know what we want in the way of a pneumatic tire for motor cars and most of us know equally well that there is no reasonable likelihood of ever getting perfection in this direction any more than in any other. But year by eyear tire makers are advancing along the road of improvement and my object in writing this is to tell the user of tires briefly how the "shoes of an automobile" are made. since in my opinion a slight knowledge of the manufacture of the pneumatic tire must be of advantage to the owner\_ of a car, and thereby, incidentally, of pneumatic tires, to enable him to, at all times, get the best results from the use of his car. It has been my experience that a certain proportion-a very considerable proportion—of tire troubles could have been avoided had the user of them been conversant with certain elementary principles of tire construction.

Assuming the complete canvas casing ready for receiving the rubber, I will now deal with the manufacture of the rubber from its raw state until it is ready for fitting to the casing. You are all, doubtless, aware of the origin of rubber, and most of you have seen solid blocks of raw rubber at automobile shows and elsewhere, though it will do no harm to tell you that these heavy blocks of rubber are quite exceptional, and are only, so to speak, prepared for exhibition purposes.

On arrival at the factory such blocks of rubber, or in whatever crude form the rubber is delivered, are first of all cut up into small pieces and then carefully boiled to remove all impurities and dirt. These impurities consist mainly of stones, gravel, and dirt, although I have seen many other varieties of im-

purity, including knives, corks of whisky bottles, and other evidences of the "white man's burden" that have penetrated to the distant parts from which the rubber comes.

Having been boiled, the small pieces of rubber are passed through heavy rollers having rough surfaces, which transform the blocks into crinkly-looking sheets.

When the raw rubber arrives at the mixing department together with each batch, as it is technically called, sulphur is served out from the chemical department, this being used for vulcanizing, and at the same time other ingredients which are used to assist such vulcanizing, or to toughen the rubber. Here it is that our friend the rubber "scrap" man manages to dump in his collection of old gum shoes, hose, tires, and the like, which dumping has done so much to make a by-word of certain makes of American tires.

After being mixed the rubber is then taken to be calendered. This calender machine consists of huge hollow rollers, which are heated by steam, and in which the rubber is spread on sheets to as thick a quality as is necessary for the required purpose. From the calender the rubber goes to the cutters, who cut it into the necessary strips and pass it on to the tire makers proper. These secure to the casing the necessary thickness or amount of rubber such as may happen to be required for the tire upon which they are then engaged in making.

The tire, having passed through these various departments, is soon a complete cover, ready for vulcanization. After the tire has been cured by being subjected to the necessary heat (which is, I may explain, always obtained through the agency of steam), the tire is taken

out of the mould, forced off the "former," and is then complete beyond the necessary trimming of the superfluous rubber which will have been forced out of the mould through passages provided for this purpose, and, beyond the necessary amount of handling, is then ready for use.

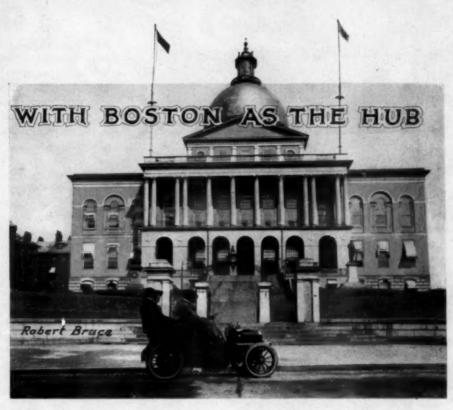
Should, however, the tire be of the type fitted with a tread, it has to undergo a further cure, this being generally effected in the following manner: The tread is built up separately, and after being solutioned to the casing, the whole cover is wrapped upon a suitable "former" with canvas-hence the rough marks always seen on the tread of such a tire, these marks being formed by the canvas wrapped round the cover to secure the tread during the second process of vulcanization. It is on this particular point that I think a little more knowledge will be distinctly valuable to the user of pneumatic tires.

To all intents and purposes, as you will have gathered from my remarks, the process of the manufacture of rubber is in a way closely akin to the process of manufacturing bread. The roller kneads the rubber into a consistency and mixture ready for baking, the vulcanizing process being analogous to the baking of bread, and while bread will stand toasting, the border line between toast that is fit to eat and toast that is not fit to eat is very narrow, so one can say that the border line between a properly vulcanized tire and an over-vulcanized tire is also very fine.

Having now briefly outlined the salient features in the manufacture and use of tires, let me add a few more to the many hints which may perhaps be of some little value in selecting tires. Taking, first, the covers, do not be led away with the idea that many folds of canvas necessarily mean strength. Indeed, to merely add additional layers of

canvas is, in a sense, an unskilled way of solving the tire problem, and one which can only retain its popularity pending the discovery of a more scientific and correct method. As time goes on others are bound to be made, and I have no doubt that in a few years we shall look back upon our present heavylayered tires and wonder how we were ever fools enough to use them. Secondly, beware of the tire having wrinkles on the inside of the cover as you would-shall I say?-of a Long Island constable? Such a tire is badly made, and whoever the manufacturers are, I strongly recommend you to leave it alone. Thirdly, never purchase tires having fat edges; that is to say, in which the lips bedding in the rim do not slope away to a knife edge. If they do not, the movement of the tire will cause the air pressure in the tube to force it between the beads and a nip and a burst are certain to ensue where such tires are used.

Finally, with regard to the use of the tires, I cannot too strongly advise every one to stop and repair any serious cut immediately he notices it, even if this be at some personal inconvenience. "A stitch in time saves nine" is true of nothing more than of pneumatic tires on motor cars. Last but not least of all, let me advise everyone to deal only with firms of repute in the tire trade. may perhaps seem a little harsh on the young and untried firms, but depend upon it that if these do their work properly their reputation will soon become known, and they will very quickly attain a place among the recognized houses, but until they do this you confine your tire buying to the older concerns, and even in them see to it that you do not favor makers whose warehouses are filled with "scrap," which might by accident find its way into the mixing room.



TAKEN all in all, the Boston cityand-suburban district is undoubtedly the finest single automobile riding
section in the United States. To describe the many charming and historical
places which may be reached in even
a half day's motoring from "The Hub,"
would require a small encyclopedia, for
within fifty or at most a hundred miles
of the State House lies a large area
containing a multitude of picturesque
suburbs, with old-time associations, such
as are afforded by no other city in all
America.

If one is from the interior and desires marine scenery, there is the trip to Salem and Gloucester, the famous whaling port, thirty-five miles away on the north shore, through Lynn, Marblehead, Swampscott, Manchester-bythe-Sea, and Magnolia, and then around Cape Ann. If one desires a more hilly trip of only a little longer distance, he

may go toward Mt. Wachusett, and have a pleasant journey through a beautiful country. Great Blue Hill, only eight miles from Boston and in plain sight from the "Golden Dome," is a mountain in all but name. From its summit may be had one of the finest views along the Atlantic coast, including among other vistas, the north and south shores, the Milton hills, with adjoining wild scenery, ponds, rivers, vales and countless small towns.

Occasionally one may see a railway train moving along by the river in the foreground, looking like nothing so much as a black snake winding its way between the far-away rows of trees. On a clear day no more enjoyable trip can be had from Boston than one through the park system of the city, pronounced by many the finest in the world, through Franklin Park and Mattapan to Blue Hill. One might even spend a whole

day in the swiftest of motor cars gliding over the smooth and level roads of the park system alone, branching off into good country highways at the dictates of fancy. The character of this park system, its variety and extent, will make it a revelation to all first-time visitors.

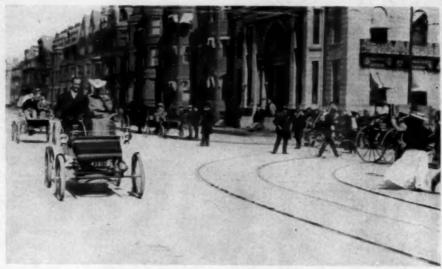
It is a unique thing in the way of park improvement, and no other American city possesses anything of similar nature. Chicago has its magnificent but formal boulevards; Philadelphia its charming drives along the Wissihickon and through Fairmount Park; and New York its noble Riverside Drive, commanding river and landscape scenes of imperial grandeur. But an altogether different creation is the parkway system of Boston. It more nearly resembles the modern public works of certain German cities, like Bremen and Leipsic, where the demolition of the ancient fortifications surrounding the old "inner cities" gave opportunity for the creation of pleasure grounds through the open spaces thus left-the inequalities of the surface made by the debris, and the ditches surrounding its walls, inviting picturesque forms of treatment in landscape and water surfaces. But the Boston Parkway is on a far more extensive scale than anything presented in its German prototypes. Like them, it originated in the artistic handling of an important engineering problem, as the most practical and economical form of development. And with its varied opportunities for recreative use, and pleasuring possibilities on land and water, the Parkway promises to become—if it has not become already-one of the most popular of Boston's many notable institutions,

The Parkway may be described briefly as a line of communication for pleasure purposes, distinguished by picturesque and continually varying scenery,

with water courses as the central feature, and furnishing the leading motive of the design for the greater part of its length; the space expanding here and there into genuine parks in extent and landscape character. Its creation was the result of a gradual development of the idea upon which the first section of improvement was designed—the beginning of a great park system. Much as it has cost, it has paid for itself many times over in land reclaimed and property values increased.

Strung along the line of this system are four beautiful parks, each one of which complements the other and forms a logical step in the gradual development of scenic changes from the maritime marshy character of the Fens to the rural New England character of Franklin Park. Three of these parks are Franklin Park, the Arnold Arboretum and Jamaica Park. The fourth. which immediately adjoins the last named, is Leverett Park, the wide extension of the Parkway between Tremont and Perkins street. The name was conferred by former Mayor Matthews, of Boston, to whom it was suggested by its main feature, Leverett Pond, perpetuating also the connection of a historic family with the locality.

From the Charles river to Franklin Park, the parkway system proper has a total length of about 29,500 feet, or not far from six miles. In a way it has double that length now, with prospects for further additions. Commonwealth avenue is a part of the same riding system, adding something in length bringing one to the heart of the city at the Public Gardens, Then it connects with the grand boulevards of Beacon street and Commonwealth avenue "extension" from the Charlesgate to Chestnut Hill Reservoir, and thence by the Central Boulevard of Newton to the Charles river at Auburndale. On the



BEACON STREET, NEAR MASSACHUSETTS AVENUE

other side of Franklin Park, and connecting therewith by the main drive, is the boulevard of Blue Hill avenue, now laid out to the Neponset river and destined, in all probability, to an extension through Milton to the Blue Hill Reservation and beyond.

Southward from the Arnold Arboretum is projected the Blue Hill Parkway, to be distinguished by picturesque elements recalling those of the original parkway, and running through the West Roxbury district. This connects with the Blue Hills Reservation by way of Bellevue Hill, Stony Brook Reservation, the valley of Mother Brook, and thence across the Neponset, in the neighborhood of Paul's Bridge. way of Westland avenue the boulevard of Massachusetts avenue connects the Parkway with the Dorchesterway at Dorchester Five Corners, and thence by the Strandway along the shore of the Old Harbor and Dorchester Bay to Marine Park and Castle Island.

At the Charles river the Parkway connects with the several miles of esplanade, already begun and designed in time to border the basin on the Boston and Cambridge side, and thence up the river by the proposed line of parks and parkways to Watertown, Newton and Waltham, already provided for. It will connect with the Cambridge system by way of both Harvard Bridge and the new bridge proposed in extension of the Audubon road to replace the present bridge at Cottage Farms. Thence lines of parkway are contemplated or proposed by the way of Fresh Pond or Alewive Brook to the Mystic and up the Mystic Valley through Arlington and Medford to Winchester. In the future, too, some way of connection will probably be found across Cambridge and Somerville to merge with the projected boulevard from the Mystic river to the Middlesex Falls and other proposed ways to Revere Beach and the Lynn Woods.

Thus the great Boston Parkway will form a trunk line in a grand system of municipal boulevards which will in time transform important sections of the Metropolitan District and permanently establish a substantial and beautiful character for regions that would otherwise be certain to degenerate. Vast as is this scheme of park improvement, considered as a whole, it will, according to the analogy of all experience, be found to be a profitable undertaking in its effect upon the prosperity of the future city. For those whose time is limited, or perhaps who prefer to do their automobiling in and about Boston, or distant visitors who hire a machine because of the expense and inconvenience of bringing their own cars along, the exploration of this park system will be a delight lasting until the series of journeys can no longer be continued.

Looked at another way, the park system comprises six distinct sections. First is the Charlesgate, comprising that portion between the Charles river and Boylston Bridge. The remaining sections take the common suffix of "way" from the generic designation of "parkway" that includes the whole, the names of the respective sections being either descriptive of their character or dervied from local circumstances. Next there is the Fenway, from the adjacent fens. Then comes the Riverway, from the river valley through which it runs, between the Fenway Bridge and Tremont street. Fourth is the Jamaicaway, running beside Leverett Park and Jamaica Park, and therefore, including those two sections. From Jamaica Park the Arborway runs to and beside the Arnold Arboretum to Franklin Park. These several "ways" designate the main line of drive, which runs along the left side of the parkway, on its outward course, from the Boylston Bridge, forming one continuous thoroughfare to Franklin Park.

If literary associations have any attractions (and who is indifferent to them?) Harvard Bridge and Harvard College, and Longfellow's home in Cambridge, as well as the homes of Em-

erson and Thoreau in Concord, may all be reached in a single short afternoon, likewise the "Wayside Inn" in Sudbury, and the "House of Seven Gables" in Salem. There is a historical trip either over the route taken by Paul Revere, or that taken by the British soldiers, to Lexington and Concord in 1775, likewise a trip to the Colonial Homes at Salem, or to Plymouth, for relics of the very first days of American history. On a summer day one would do well to take a trip through Ashmont, Milton and Quincy to Nantasket, and from thence over the famous Jerusalem road to Cohasset, where many wealthy Bostonians have their summer residences.

Wishing to go to the other extreme, visiting motorist can journey through a typical New England rural district to Fitchburg, or speed to the great manufacturing city of Lowell, 28 miles away, through Cambridge, Bedford and Billerica. The trip to Chestnut Hill, just out of Boston to the southwest, over the famous Beacon Street Boulevard, is perhaps the most noted ride in Massachusetts, and on fine afternoons this thoroughfare is sprinkled with motor cars. This ride may be prolonged over the Newton Boulevard to the Newtons, Wellesley, Auburndale and other places, giving one the opportunity to see the beautiful residences of these typical New England suburbs.

There is an infinite variety to these outings, and a different route may be taken, if desired, every visiting day. In fact, it is doubtful if any automobilist in Boston or vicinity has covered all the good trips, no matter how long he has been an enthusiastic searcher after new things. When one has seen the suburbs of Boston to his satisfaction he may, if time permits, make a little tour toward Rhode Island and Connecticut, through the "Heart of the Commonwealth" to the Berkshire Hills, or even to the

White Mountains, the latter trip being very popular since the First Annual Mt. Washington "Climb to the Clouds," promoted by the Automobile Magazine, blazed the way. There is something in the New England landscape, whether taken in the highlands or the lowlands whether on the seashore or in the mountains, which is perennially attractive. It is never wearisome, never monotonous.

The nearby waterways temper the summer's heat, while the splendor of New England's autumn may be seen in a very short journey in any direction from her narrow streets. Winter and

spring have their disagreeable features, it is true, but the surrounding good roads are in such condition as to make some short trips possible almost every week in the year. No other city in the Union possesses the attractions for the chance visitor or the permanent resident that Boston does, especially they of the automobiling brotherhood. Town halls, libraries and churches are seen on all sides, usually quite picturesque

in their locations among fine residences and superb trees.

What is known as the "Back Bay" is, at least in outward respect, an interesting subject of study for the visitor, who soon comes of his own volition to the conclusion that this portion of modern Boston is one of the most perfect residence districts known to American cities. Built up since the 60's on what was formerly marsh land and the flats of the Charles river, this improvement has not only brought the State in several millions of dollars, but helped to

make Boston as famous for a civic perfectitude as for literary pre-eminence. It is perhaps such things as this that now and then cause the Boston nose to tilt in superiority; yet the city has a right to feel a little "superior" about its civic functions. The streets are kept clean and to further this, at regular intervals along the sidewalks are placed large metal cans into which rubbish and paper that would otherwise litter up the streets is thrown. This is imitated by most of the small towns around Boston, to whom the New England metropolis is the very center of the world.



Commonwealth Avenue's Shaded Drive

Motorists who care equally for the water will find plenty to interest them. It is at or near the Newtons that one of the most idyallic features of out-of-town life is met with, and that is canoeing on the Charles. The reaches of the river are very beautiful, as the Charles is most uncertain in direction and winds in and out with lily-filled coves and crooks and very little current. The banks are tree lined with alder, linden and elm, and under such conditions boating and canoeing find a most delightful environment. Floating along

in a canoe in the golden twilight (while not so strenuous as motor boating) is one of the poetic possibilities, while a "float" of the Newton Boat Club, with the river in front of the club house packed with hundreds of canoes, moving in and out while song, music and laughter float on the air, is as near a Venetian fete as can be found anywhere in America. The general aspect of the Charles when the canoeing season is at its height is like that of the Thames. In this the Bostonians seem to follow the English example in their outdoor life and recreations, for while the city fathers would imitate the beautiful marine basins of Hamburg in improving the Charles' banks, in the upper reaches of the same river the English Thames and its amusements are the standards.

All this is very new and captivating to any who may be under the impression that New England is still a synonym for authority. Such is not the case, and in fact the pendulum seems to be fast swinging the other way. The meeting house and town library are not the only factors in New England existence, and it may relieve the easy-going New Yorker and Pennsylvanian or the visitor from the West to know that the New Englanders are not all Emersons and Elihu Burritts; nor do they take their "intellectuals" as seriously as conventional traditions might indicate. Indeed, a town library not a hundred miles from Harvard College is used as a convenient meeting place of evenings for the town band to practice in, while even the sacred precincts of Concord, a temperance town, has admitted within its confines, to last over the Fourth of July, something like 200 cases of beer.

The accompanying drawing will show probably the crookedest 100-mile automobile drive ever laid out anywhere, and of course it winds in and about Boston. Starting at the Massachusetts Automobile Club building, on Boylston street, it turns right almost at once on Fairfield street. Then left on Beacon street, which is followed to Chestnut Hill Reservoir, passing around first reservoir to right and turning left into Commonwealth avenue (Newton Boulevard). Continue straight on this boulevard to and through Newton Center to Washington street, in Auburndale. Take Washington street through Newton Lower Falls, Wellesley Hills and Wellesly, thence bearing right and following the street railway tracks to Natick. At the west end of the square in Natick turn right, bearing to the left over the B. & A. R. R. tracks to Felchville, continuing on through North Natick and Cochituate to Wayland.

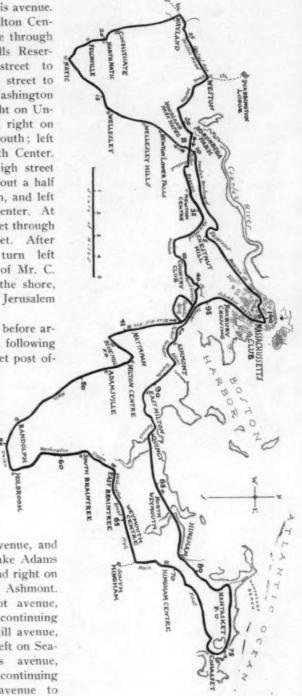
The proposed country house of the Massachusetts Automobile Club can be visited, if desired, by turning to the left at Wayland, and taking the first left again, crossing the river by two bridges, in all a distance of about three-quarters of a mile. Continuing on the 100-mile drive, turn right at Wayland on Boston road into Central avenue Weston. At Weston post office turn sharp right on School street to Newton street and into South avenue to the Charles river at Norumbega Park; also the beginning of the Newton Boulevard. Continue on this boulevard and, after crossing Washington street at Auburndale, bear right into Fuller street, right on Chestnut street and left on Beacon street through Newton Center to Chestnut Hill. Take right to Hammond street, continuing same to Newton street, passing the Brookline Country Club into Pond street with Jamaica Pond on the left.

Take Pond street by right turn, then sharp right and left on Green street into Glen road through Franklin Park to Blue Hill avenue. Right on Blue Hill avenue, continuing same through Mattapan to circle at end of this avenue. Left on Canton avenue to Milton Center, right on Randolph avenue through Adamsville and the Blue Hills Reservation. Bear left on Main street to Randolph, and left on Union street to Holbrook. Sharp left on Washington street to South Braintree; right on Union street to East Braintree; right on Washington street in Weymouth; left on Broad street to Weymouth Center. Continue straight on into High street to junction of Main street about a half mile north of South Hingham, and left on Main street to Hingham Center. At square take right on East street through North Cohasset to Cohasset. passing square in Cohasset, turn left with sharp turn at premises of Mr. C. W. Barron on road nearest the shore, continuing on this road into Jerusalem road to Nantasket Beach.

At the foot of the steep hill before arriving at the Beach turn left, following the street railway to Nantasket post of-

fice. Turn right, also following the street railway tracks through North Weymouth and Quincy Point to Quincy. At the watering trough in Quincy, turn sharp right on Hancock street, bearing left into Adams street to East Milton. At the railroad station (but before crossing), turn sharp right on Granite ave-

nue. Contine on Granite avenue, and after crossing the railroad take Adams street into Codman street, and right on Dorchester avenue through Ashmont. Bear to the left on Talbot avenue, crossing Washington street, continuing on Talbot avenue to Blue Hill avenue, which take by right turn. Left on Seaver street into Columbus avenue, through Roxbury crossing, continuing on the same, Columbus avenue to



Boylston street, which keep to the Massachusetts Automobile Club house, at the point of beginning.

One thing the touring automobilist notices at the very beginning of his journevs in and about Boston, especially if he be from the prairie country, is that there are few level stretches. Sometimes, too, as if to contrast the best with the worst, there are blocks of rough cobble stones on streets that must be used to connect well-paved thoroughfares. Some are better and some worse, to be sure, but the riding is more pleasant and satisfying when you get used to the electric cars that whiz and buzz along almost every road. Now you pass them, now they pass you, and make you feel sometimes as if they were going to crawl up your spine when behind you, or perhaps jump the track and mash your life out when they are ahead and coming toward you.

The environs of Boston have the electric car mania in its very worst form, and by this means people who do not own or are not able to hire motor cars can go almost anywhere by a system of very cheap fares. But I wonder what Mr. Longfellow would have thought of either trolley cars or automobiles if they had been in the Cambridge of a generation ago as they are in the Cambridge

of to-day?

#### When the Battery Runs Down

When a battery or an accumulator becomes run down to such an extent

as to refuse to produce a spark, ignition of sufficient power may often be obtained by a passenger agitating the trembler with the fingers. Such a method has been found sufficient to run the car a mile or two.

#### Fable for 1904

All in his great black armor, the prince mounted his white charger, which was charged with gasolene.

He rode proudly within the liststhe snortingest object in the park.

Peering forth beneath the shining visor of his helmet, he perceived a maiden in distress upon the back of a fiery dragon.

He essayed a knightly dash to rescue

Chug!

That is how it sounded. Anyway, they picked him out of the road and hauled him to the castle in an ambulance.

The sergeant demanded:

"What were ye after doin'? Chasin' the gurrul?"

"Her horse was running away," he explained. "I nearly had the bridle when the horse went over the fence. I hope the girl is all right."

The sergeant retorted:

"She was only tryin' to get away from your derned gasolene gocart-the horse is as tame as a rabbit. git thirty days and I'd like to see it."

Moral—This is not an age of chivalry.



s a big bull a little way up the road.'

"I ran across a big bull a l "Did he charge you?" "No, the farmer did that."

#### The Homing Flight of the Blue Arrow

By F. W. Haskell

IN June, 1903, I purchased a 15 H. P., two cylinder vertical engine, touring car. Up to June 27, 1904, I had run the car 4,528 miles. It had always given me satisfaction and I had never experienced a road delay; but as my longest continuous run had been but 73 miles, I felt that I had never really tested the car's staying qualities—which I determined to do. On the date mentioned, I shipped the car to Boston, and during the two weeks succeeding its arrival there I ran it 788 miles in the "North Shore" country of Massachusetts, then I came home by rail, leaving the car in Boston.

On August 6, my wife, Mr. Rodney W. Day, of Buffalo, and myself, started for Boston, arriving there Sunday morning, August 7. The plan was to start from Boston at 9 o'clock Monday morning; and, weather permitting, we hoped to reach our home at Niagara Falls by Saturday evening. None of us had ever been over a foot of the road, and the only guidance we had was that furnished by the various route cards printed for the St. Louis and other runs. On the advice of a Boston automobilist we chose the route out Commonwealth avenue to Newton street, the latter taking us into the State road at Weston. We started all right, but in a few minutes managed to get off the avenue, and in a little while more realized we were lost. We told our troubles to a policeman, who directed us to go back for a' mile and a half, where we found a street which returned us to Commonwealth avenue.

This false move, and the pasty surface of the roads, made it 11.50 when we reached Weston, 15 miles out. From there on the roads were dry, and, with a few exceptions, were fine, and over

them the speedometer frequently showed over 30 miles per hour, but the sharp curves, with slowing down for teams and through towns, and the occasional bad spots, kept our average speed down to about 15 miles per hour.

We passed Marlboro at 12.25 (13 miles in 35 minutes), Northboro at 1 P. M., Shrewsbury at 1.20, and stopped for lunch at the State Mutual Restaurant, Worcester, at 1.45. We left Worcester at 2.40, reached Leicester at 3.10, and Spencer at 3.25. Driving a car around home, one knows just what to expect of it on all the local hills; but anticipating the difficulties of the same thing on strange roads always makes me a little nervous. I had often heard of "Leicester Hill," and dreaded it. The car took this hill on second speed, showing 15 miles an hour to the top.

We passed West Warren at 4.34, and suddenly went from one of the finest roads in the country to one of the poorest. The road was peculiarly bad to Palmer, and only slightly better to North Wilbraham. From that point to Springfield it was superb. We went over the 11 miles of it in 25 minutes; and as the last three miles were under reduced speed through the center of the city, the other eight must have been at better than a thirty-mile clip. The Hotel Worthy at Springfield welcomed us at 6.20. Distance covered for the day, 96.4 miles. Running time, 7.03. The route cards give the distance as 96.1 miles. Allowing for our detour in Boston, I think the actual distance by our route should have been about 94.5 miles.

Tuesday morning we left Springfield at 8.58, and reached Huntington, 23 miles, in I hour and 30 minutes. The next 20 miles to East Lee, took 2 hours and 27 minutes. Regardless of the

hills, there wasn't a foot of the road where I dared to put in third speed. There was a demoralizing combination of vileness-mud, stones, ruts, slime, sand and horses. All of this, however, was only preparatory to the climbing of Morey Hill, which, lying just west of Becket Centre, is the culmination of the difficulties between Springfield and Albany. The hill is nearly a mile long, and is in waves varying from 15 to 20 per cent. About half way up the hill my engine stalled. I was indignant; but after examining the conditions, I didn't blame the engine so much. The road is composed of a mixture of sand and rotten saw-dust. The result was the wheels had settled six inches deep in this queer combination, and in addition, one of the drivers had become squarely wedged against a big stone which was buried under the road surface. I let the car drop back a yard or so, lowered the sprag, speeded the engine, and up we went. From East Lee to Lenox the road is fine. From Lenox to Pittsfield the road is hard, but very rough. We reached Lenox at 1.20, left five minutes later and arrived at the Wendell, Pittsfield, at 1.50.

Pittsfield was left at 3.00 P. M. few miles out, the top of a mountain is reached, from whence there is a continuous down grade, over a smooth macadam road, into New Lebanon. For four miles we coasted, with the engine at rest; though the curves are too frequent and sharp to permit of speed with safety. At the foot of the hill we took the wrong turn, and found ourselves in Lebanon Springs where we didn't belong. We turned around and went back. From New Lebanon to Albany the roads are not at all bad; though they are very crooked and hilly, and in places are very stony. We were held up for several minutes at the Albany draw bridge; but in spite of that, and of our doubling on our tracks, we reached the Ten Eyck, Albany, at exactly 6.00 P. M., or just 3 hours from Pittsfield. Distance by route card, Springfield to Albany, 94.5 miles; by my odometer, 93.8 miles. Running time, 7.52.

Tuesday had been a perfect day. Not a cloud in the sky, and the temperature exactly right. Wednesday morning it was raining hard. It poured all day and it poured all night. We stayed penned up in the hotel, hating each other and everybody else. Thursday morning, the rain had ceased, but the streets were

wet and the sky gloomy.

I had been told repeatedly that the roads from Albany to Utica were the worst in the world, and after 24 hours of heavy rain, I dreaded what was before us. The route usually taken out of Albany is by the Northern Boulevard nearly north until the Troy turnpike is reached, which goes directly west to Schenectady. Just before starting, we were advised to take the direct road to Schenectady, which while much rougher, would have a bottom to it. We left Albany at 8.33 A. M., and managed to keep moving. There was bottom to the road, but the whole distance to Schenectady was through sand ruts six inches deep. Fifteen miles of which took 2 hours and 7 minutes of our time to negotiate, whereupon Niagara Falls seemed two weeks away. miles out of Schenectady the roads were very bad. Then they improved, and I was able to use third speed for several miles. We reached Amsterdam at 12.15. From there to Fonda roads were really excellent. The surface was good, but the roadway is so narrow that meeting or overtaking a team meant almost a complete stop on our part. We reached Fonda at 1.00 P. M., ate a lunch which would have been better if we had not eaten it, and left at 1.40. For several miles out of



W. R. TOPPAN AND FAMILY, CHICAGO

Fonda we found excellent macadam, and later good dirt. The 20.4 miles to St. Johnsville were made in one hour and twenty-two minutes. Then we encountered abominable roads, and were just one hour in making the next ten miles. We stopped twelve minutes at Little Falls, taking on some gasolene which was not really needed; and stopped ten minutes at Herkimer for shelter from rain. The corner hot air club at Herkimer induced us to take the road along the south side of the valley, instead of the one to the north which is given on the route cards. I am sure we gained nothing by taking this advice, for it is impossible to imagine that any other road could have been worse. The 15 miles from Herkimer to Utica used up I hour and 20 minutes, and we arrived at the Butterfield, Utica, at 6.15 P. M.

The route cards claim the distance between Albany and Utica as exactly 100 miles. My odometer showed it to be but 95.4 miles. Three miles of this were

gained in taking the direct route to Schenectady, but I can't account for the balance of the difference, unless our route from Herkimer to Utica was shorter than the card one. Our running time for the day was 8 hours, 40 minutes, the gradually increasing time required to do substantially the same distance, illustrating the tougher road conditions.

According to all information received, we had now accomplished the hardest part of the trip, and we began to feel a little chesty. The distance from Utica to Buffalo was presumably about 218 miles, and the roads, by all reports, should grow better as we went west. We therefore decided to undertake slightly longer runs, that we might reach home Saturday night; in this way recovering the day lost at Albany. Newark, N. Y., 110 miles west of Utica, by route card, was selected as our objective point for Friday night.

The start from Utica was made at

8.33 A. M., Friday. After leaving the city pavements we encountered bad roads which stayed with us all day. These roads were particularly exasperating because they had the appearance of being good. There was no mud, the hills were not steep, the roads were of good width, and not unduly stony. But all day long we ground along on second speed over "grid-iron" roads, or over roads which were pitted with chuck holes. Kirkland, 9 miles from Utica, was left at 9.20; the next 7 miles to Vernon used up 40 minutes; 18 miles more to Chittenango took I hour and 50 minutes; 6 miles to Fayetteville, 35 minutes. The roads here became a little better, and the remaining 9 miles to Syracuse were made in 38 minutes; the arriving time being 12.33, or exactly 4 hours for exactly 50 miles.

A little east of Vernon we unexpectedly ran onto the most magnificent piece of road I have ever seen. It was equal in surface to the very best of the Massachusetts roads, and much wider. The speedometer, which had been hanging around the 10-mile mark, worked up to 36, the highest shown on the entire journey, and probably the limit of my car. This bit of velvet lasted exactly one mile, when we resumed the griding.

After passing Canastota, the next town on the route was Chittenango. Arriving at a cross road, I noticed that the road at right angles to our course was of fine macadam; and a sign board pointed down that road, reading "Chittenango, 6 m." I gladly turned into the good road; when something catching the corner of my eye, I looked in time to see the sign board slowly revolve and assume a position at right angles to its former one. An examination showed that the board was held by one nail, and was swaying as struck by the wind. The slot in the post informed us

that we must still stick to the gridiron. We took lunch at the railroad station at Syracuse, nad left there at 1.15 P. M.

Next year there will be a good road out of Syracuse. At present great heaps of crushed stone occupy the roadway, and we had to take to a most uncomfortable ditch for a couple of miles. We were 45 minutes going the 8 miles to Camillus. Weedsport, 14.6 miles further on, was made in exactly one hour.

From Port Byron to Savannah, by the direct road through Montezuma swamp, is 9.7 miles. To avoid the swamp, which is practically impassable in wet weather, the route cards advise a detour which makes the distance 17.5 miles. The roads that day were so dry that I thought I would save the 8 miles of extra distance. A little way out of Port Byron, on the shorter route, I asked a farmer if that road went to Savannah. He said it did, but that I could cut off 3 miles more by taking a fork about 100 feet back, and going "by the isle." I cannot too strongly urge all automobilists to cheerfully hand over their last cent rather than "go by the isle." I speak with authority because I went "by the isle." "The isle" is Howland's Island, which is surrounded by what appear on the may to be the two channels of Seneca river. The road across the island, and for a considerable distance each side, is absolutely bad. But for a quarter of a mile at the western side of the island the road is a mere ridge through the swamp, and so narrow that a deviation of two inches would have dropped the car into the bottomless green ooze that constitutes that hideous marsh. On reaching the bridge at the western side of the island, we found it apparently ready to collapse; while the approach had been washed away and recently refilled with loose

earth which crumbled beneath a man's weight. It was found by measuring that the approach, bad as it was, was four inches narrower than the gauge of the car. We all got out and spent 35 minutes patching up the approach. Mrs. Haskell walked over the bridge, while two of my passengers held sticks at the exact spots the wheels must strike, and I started the car. It was a strenuous moment, but the car went over without accident. The passengers followed on foot, and later told me that the bridge not only heaved like waves, but swaved from side to side. The frailty of the human intellect was illustrated by the fact that we had gotten nearly across the bridge before it occurred to any of us to look at the further approach. Luck was with us, however, and that particular episode was closed. All of us dreamed of that bridge the entire night. We passed Clyde at 5.15, Lyons at 5.55, and arrived at Newark at 6.33. Distance for the day 106.5 miles; running time 9.18. The route card, via the road to avoid the swamp, makes the distance 114.3 miles,

The night stop at Newark was the pleasantest of the entire journey. We put up at "The Newark." The house from the outside was not very promising, and I anticipated hard fare and hard beds. To my surprise and delight, Mrs. Haskell and myself were assigned a suite of two rooms with bath. There

was hot and cold water, electric lights, brass beds and real mattresses. A pleasant boy came to the room and brushed us off. We had a good supper and spent a delightful evening in easy chairs on a broad second-story balcony, Newark is quite a distance from the railroad, and the absolute quiet resulted in the best night's sleep since leaving home. After breakfast the next morning, I found that the charge for Mrs. Haskell and myself, together, was \$3.50, while for the other two, it was \$1.50 each; and on paying the bill I received a cigar as a premium. I never saw those hotel people before, and may never see them again; but the comfort of that stop is worth all the advertising these remarks may give them. We left Newark at 8.10 A. M. Saturday, with the longest run of the week before us. The roads were still bad, but showed a tendency to improve. The road crosses and recrosses the canal in a way that showed the tremendously unsettled condition of its mind.

Palmyra was passed at 8.55. This town stands out in memory as the place which has seven or eight thousand cross walks, beautifully laid in concrete. These walks are about two feet wide, are arched with mathematical precision, the crowns of the arches rising about 16 inches from the surrounding country. We took the first one at about 8 miles per hour, not having previously com-



TEACHING HORSES NOT TO FEAR AUTOMOBILES IN THE FAMOUS BRETTON WOODS ACADEMY
FOR THE INCULCATION OF HORSE SENSE

prehended all its possibilities. Before recovering fully from the resulting surprises, we went over another. Then I stopped and approached the others at about two miles an hour so that we might have time to study them. Any one who wishes to get rid of disagreeable passengers, or disengage his engine from its frame, may accomplish these ends by driving through Palmyra at 10 miles an hour. Fairport was passed at 10.05, and Rochester was reached, over a good road, at 10.40. Arriving at the business center of Rochester, I stopped in the middle of the street to decide upon what to do next. While standing there, a gentleman stepped out from the sidewalk and said: "I thought you might like to ask some questions about directions or stopping places, if I am right and can be of any service I shall be very glad." I asked several questions and received prompt and definite answers. The gentleman then lifted his hat and went his way. This is a little incident, but it is one of those things which make the world seem like such a decent place after all.

We ran several blocks out of the direct route in order to stop at the railroad station for some sandwiches, then left Rochester at exactly 11.00 A. M. The direct road from Rochester to Batavia is via North Chili, Bergen and Byron, a distance of 35.5 miles. Another route via Scottsville, Mumford and LeRoy, 3 miles longer, was reported to be much better wheeling, and we decided on that course. For about 10 miles out of Rochester the road is fine. It is crooked and rather narrow, but is of smooth macadam, and, with the exception of the one freak mile at Vernon, is the best piece of road between Albany and Buffalo.

After leaving Scottsville the only directions we could get were: "Follow the telegraph poles." This was easy, until we reached a fork with the poles going out each road. We took the better looking road, and after going about two miles, found it was, as usual, the wrong one. We were informed that the road we were on would eventually bring us to LeRoy, so we kept ahead, for while the road was narrow and the country wild, the wheeling was surprisingly good. We reached LeRoy at 12.55, and from there to Batavia, over good roads, at 1.40. Leaving Batavia at 2.10, we should have been in Buffalo by 4.00 P. M.; but soon after starting, it began to rain in earnest. We plugged along to West Batavia, six miles from Batavia, then we gave it up and stood under a shed from 2.30 to 3.20, while it rained in torrents. The rain slacking up a little, we pushed ahead; but the roads were now slippery, it was still raining, and slow running was the only way to keep out of the ditch. We passed Corfu at 3.35, Crittenden at 3.55, Bowmansville at 4.45, and reached Buffalo at 5.30. The route card gives the distance between Newark and Buffalo as 105.5 miles. Our odometer made it 109.2 miles. This was the first time we had overrun the cards, and the entire distance was lost east of Rochester. I think we crossed about 4 miles of canal bridges, and perhaps the route cards don't count that.

Mr. Day left us at his house in Buffalo, and we started on at 5.45 for the final run to my house in Niagara Falls. In good weather this would have been made in one hour; but while, when a few blocks on our way, a perfect deluge came upon us. Five minutes made us as wet as we ever could be, and we couldn't think of giving up the trip right at our own door. Mrs. Haskell huddled down in the tonneau, while Billy and I just thought about to-morrow.

There is a good brick pavement to

North Tonowanda, and the rain was too heavy to make it very slippery, so we were able to make about 20 miles an hour with no apparent danger. From North Tonawanda to the Niagara Falls asphalt is about nine miles of indifferent gravel road. The road was a perfect lake, at times so deep that we couldn't see the trolley track which we straddled all the way. I ran the entire nine miles on second speed, making about 14 miles an hour, while the water thrown out by our wheels gave the sensation of a yachting trip.

When near our house, I attempted to give a crow of triumph with the horn; but it was full of water, and a faint, gurgling grunt was all that came. We pulled into our driveway at 7.20 P. M.

Distance for the day, 132.2 miles. Time, less stops for lunch and rain, 9.10. Total distance from Boston to Niagara Falls, by our odometer, 524.3 miles, or 4.2 miles less than that given by the route cards.

In the foregoing you have the bare story of the run; here are some of the experiences gained by those who made the trip which are of interest, and may be instructive to the automobilist everywhere:

#### WHAT THE CAR DID.

Last season my car had run 3,164 miles (by the way, why is it that the machine without an odometer always runs so many more miles than does one with an odometer?). During the winter it had a general overhauling; which, however, was more in the nature of additions than repairs. So far this year the car had been run 2,152 miles up to the time I left it in Boston, and has had no attention other than the usual grinding of valves, etc. Whilethe car was in Boston, it was in the hands of the agents of its maker, who had instructions from me to put it in the best

possible shape for the run home. I imagine they found nothing particularly wrong with it, for in addition to the lubricants used, the only charge was for one grease cup and six hours' labor. My tires are 32x3\frac{1}{2}, heavy profile. All shoes were new on June 15, 1904, and had run a little over 1,000 miles before starting on this trip from Boston. The tubes on the two front wheels were those which came with the car originally, and had been in use for 5,316 miles. One rear tube had run about 4,000 miles, and the other was new at the time the shoes were put on.

We started from Boston with a full gasolene tank. I had the tank filled each night, and kept an accurate record of the amount of gasolene necessary to do this. The entire quantity consumed, including that required to fill the tank upon arrival at Niagara Falls, was 36 gallons. . In addition to the 524.3 miles of the journey, the car ran a total of 5.3 miles at night stops, between hotels and garages. This makes a total car mileage of 529.6, and an average distance traveled per gallon of gasolene, of 14.71 miles. The general road conditions are fairly reflected by the following statement of miles per gallon for each day: Boston to Springfield, 16.12; Springfield to Albany, 15.82; Albany to Utica, 13.83; Utica to Newark, 13.51; Newark to Niagara Falls, 14.77.

One dose of three pints of cylinder oil is supposed to last my car for 300 miles. Anticipating considerable low-gear work, and wishing to be on the safe side, I told the man to change the oil every second night. At Springfield the car was washed, but the hood over the engine was not even lifted. At Albany the oil was changed, spark plugs cleaned and tires pumped hard. At Utica nothing was done but washing. At Newark the oil was changed; and as the porcelain of one of the spark plugs

showed a slight crack, another one was substituted, as a matter of precaution.

These constituted absolutely all the attention given to the car and tires during the entire trip. We were never delayed one second on the road. I did not detect a single miss-fire, the car came into Niagara Falls as sweetly as it left Boston, and up to this writing no repairs have been made nor required. The cooling water boiled just once on the trip. Immediately on getting into a higher gear the boiling ceased, and when we next filled the tank it would take but half a gallon. From the amount of water required each night, I am sure the car could have made the entire journey with no addition to the water with which it started from Bos-

The ignition of my car is effected by means of a battery composed of four small cells, costing 30 cents each. A second battery is held in reserve, to be brought into use by throwing a switch. I long ago gave up the use of high priced batteries. The expensive ones may last a little longer, but the cheap ones do as good work while they last. If a battery costing \$1.20 lags a little, it takes no mental effort to throw it away and put in a new one; while if it is a \$10 battery, there is a temptation to hang on, looking elsewhere for the trouble.

Before starting on the trip I had read the accounts of the first stages of the St. Louis run; and after we got home I read the accounts of its finish. Possibly the writers dilate on the troubles and ignore commonplace success. But, I have been wondering why it was necessary to have so many broken axles, steering knuckles and springs, and why so many cars went into the ditch.

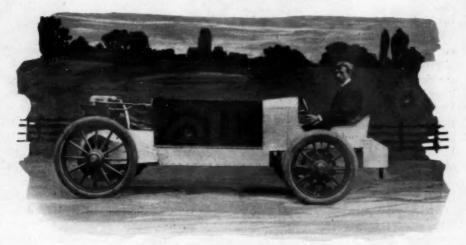
We went over the same roads, and there never was a minute (except when on the rotten bridge) when we seemed to be anywhere near danger. We never got out of bed before 7 o'clock any morning, and never started until our breakfasts had been down long enough to stay down. There was always a leeway of nearly two hours of daylight after our arriving time each evening. The best runner on earth could not have made so clean a run as ours unless he had an honest car under him; but, on the other hand, the best car made will give trouble if not properly handled.

When the road is smooth, straight and clear, I drive my car at its maximum rate. I endeavor to avoid side strain, and avoid ditches by easing the speed on curves. I am careful to start and stop without jerks. On coming up a hill with open throttle, I come almost to a stop on the brow of the hill, so as to know what is ahead before running into it. With certain road conditions a car will begin to jump up and down, with increasing vibrations. When my car starts to do this, I at once check the speed until the vibrations cease. In going down hill I always have the car under such control that it could brought to a stop before striking any possible obstruction; and in going over a slippery or rutty road I never go at a speed that would mean the ditch in case of a skid. On approaching a railway crossing which did not permit of a clear view in both directions, I always stopped and had the man go ahead and flag us.

Perhaps the best general instructions that could be given in the interests of the car, are: Drive in such a manner that the tonneau passengers are comfortable.

### ROADS

The best roads we found were in Massachusetts, and the worst roads we found were in—Massachusetts. Of the 165 miles of the direct route in Massachusetts, about 130 miles are of the



WALTER CHRISTIE IN HIS SELF-MADE 70 H. P. RACER

finest macadam, nothing being left to be desired but greater width. The other 35 miles are positively bad. It is the policy, however, of Massachusetts to connect up its main roads, and within a few years the entire length of the State can be traveled over good roads.

In New York there is a feeling of disappointment over the condition of the improved roads, while the unimproved ones are not so black as they have been painted. The roads from Albany to Utica have been held up as the vilest in existence. They are by no means good; but, as we found them, they average up better than anything else east of Rochester. From just out of Schenectady to beyond St. Johnsville, a distance of about 50 miles, the roads will generally permit of a car's normal speed with comfort to its passengers. From the point west of St. Johnsville, a mile of good road is rarely found until Rochester is approached.

Many of the newly constructed roads give every promise (or threat, rather) of becoming dangerously bad in a short time. These roads are so narrow and have such high crowns, that to ride with an even keel vehicles are obliged to occupy the exact center of the road, wearing deep ruts, in which one must stay or slide over the bank.

Local ideas of road condition are painfully deceiving to the tourist. At Utica, and at every point west of there, we were told exactly the same thing—"You have come over the worst of it. The roads from here on are fine." And they grew steadily worse until we struck Rochester.

Another crying need in New York State is sign boards.

#### HORSES.

We who dwell in cities are apt to hug the delusion that the horse has become accustomed to the automobile. In Niagara Falls, in Buffalo and in the territory between, an automobilist never thinks of the horses, because the horses never think of the automobiles.

On our trip, we saw, outside of the cities, exactly one automobile each day; and 95 per cent. of the horses and 99 per cent. of the drivers manifested abject fear of our car.

It is a positive fact that the safest thing to do in passing a horse from either direction is to get past it as quickly as possible. But the law says otherwise, and drivers, except the few who know how to drive, seem to endorse the wisdom of the law.

Probably 20 per cent. of our entire running time was lost because of horses. This is the most irritating feature of a long tour; but it must be remembered that the sensations of the person who meeting an automobile has visions of broken wagons and bones, are probably more uncomfortable than those of the automobilist, who merely suffers delay.

Acting on the letter of the law, and catering to the weakness of drivers rather than doing the really sensible thing, I made it a point to observe the slightest expression of desire on the part of a horse driver. I never passed a horse in either direction at a faster rate than eight miles per hour. On overtaking a horse, I sounded the horn while a long distance back, and then kept quiet; never passing until the driver had indicated that he expected me to go by.

Thirty or forty times a day I was at an uncomfortable angle in the ditch, with the engine stopped. A dozen times a day my man led horses by. A number of times I made detours or turned into cross roads to allow a badly frightened horse to recover its wits.

All this was intensely annoying; but a partial recompense was the thoroughly good feeling displayed on the part of every one. We never received a cross word nor a black look; while an astonishly large number of drivers were thoughtful enough to warmly thank us.

We were saved a whole lot of additional trouble through the intensity of the terror which seized many drivers. When I saw the first one let down the fence rails and take to the woods, I felt ashamed at being such a public nuisance; but after losing hours in horse encounters I got hardened enough to rejoice

when a driver left me in entire possession of the road.

There were a few instances which were supremely funny. At the time, the possibility of tragedy overshadowed the comedy, but in a proper time perspective, the lighter side comes out more strongly.

We met, near Buffalo, a woman driving a single horse attached to a light wagon. She waved furiously at us from a distance. We stopped and awaited developments. The woman wound both reins around her wrists, apparently tried to lift the horse off his front legs, and came ahead, her nerve tank being at about 1,000 pounds pressure. As she passed, she hissed, between clenched teeth: "My horse is awful scared at them things." But the horse never looked at us, nor increased his mournful pace.

Between Clyde and Lyons, coming around a curve in the road, we saw a buggy headed towards us; fully eighth of a mile away. Immediately there was a waving of arms and clothing, and two women piled out. I pulled into the ditch and stopped the engine. After watching the conference for about three minutes, I sent Billy ahead to see what was doing. The women produced a big veil from somewhere and wound it around the horse's head. Billy protested that that would only frighten the horse, but was told the horse was a mustang, and was afraid of and balked at everything. When the beast was properly draped, Billy started to lead him by. He came along quietly until near the automobile, when he began to do all the stunts in a horse's repertoire. Billy had one hand on the bridle, and the other arm over the horse's neck. They passed us at a rate which broke all speed laws, the buggy dancing up and down in a way which promised its early disintegration. I was expecting to see Billy dashed to pieces, and I yelled to him to let go. The women came along, wringing their hands and groaning. The horse quieted down a couple of hundred yards behind us, and soon stopped. When Billy came back I asked him why he didn't let go. "Let go? I couldn't let go. I was taking steps ten yards long."

Two women, knowing nothing about the handling of horses, drive a mustang which they acknowledge takes fright at everything, along a public highway; and there is not only no law, but no public sentiment against it; while an experienced man driving a perfectly controllable machine, which cannot be frightened, and cannot move except as he, wills it, is hampered by multiple restrictions, and is regarded by the public as a public menace.

The horse, with an ancestry in training for thousands of years, is the same silly, unreliable, treacherous brute he was in the beginning.

An automobile, unheard of ten years ago, obeys the slightest wish of its operator and, unless handled with criminal carelessness, is a source of danger to no one.

The dangerous thing is taken as a matter of course. The safe thing is legislated against. Our unborn grandchildren will, in their mature years, have an easier time.

Of other animals encountered; a dog is a dog everywhere. I have always hoped I might kill a few of them, but have not had that hope realized. Cows and sheep will almost allow themselves to be pushed off the road, but one does not usually meet enough of these animals to make them a serious factor. Pigs, will scamper in all directions out of your way. Domestic fowls do everything possible to get themselves killed. It is almost impossible to keep from running over the chickens which, showing

every sign of terror, run deliberately from safety to right in front of your wheels. On our trip we didn't even hit a chicken; but this was due to care carried to the extent of fanaticism, coupled with unusual luck.

#### SOME OTHER THINGS

Our trip demonstrated to me that there are two wants of the touring automobilist which have not yet been supplied; i. e., reliable route descriptions, and honest hotel lists.

We were provided with the official blue book, and the St. Louis run route cards.

In Amsterdam, I asked a man the way out of town. He said "Turn into this street, take the first road to the left and it will take you straight into Buffalo." (280 miles!) That statement was just about as sensible as the printed directions we were trying to follow. A distance of 50 miles will frequently be covered by: "Proceed along straight road," "Continue as before," "Follow main highway." If a man has been over the road a dozen times, or if he has a superhuman imagination, he might arrive at his destination by aid of these terse sentences; but sometimes a man goes over a road for the first time, and some men are only mortal-and they get lost.

It is ridiculous to attempt to describe forty miles of strange road in ten words. All forks should be mentioned. All prominent landmarks, either natural or artificial, if permanent, should be given. It would be well to note fixed prominent objects, even if on a straight road, as it helps a whole lot to simply have the assurance that you are all right to that point. Route book compilers should take a lesson from me and not be so tremendously afraid of verbosity.

Choice of hotels is largely a matter of temperament. I do not find that

sleep comes any too readily in a strange place; but, when added to the strangeness, are the noises of passing trolley cars and the various sounds of the business center of a city, the night affords anything but the rest one needs.

When I finish a day's run, I long for a wash, a good meal served quickly, then a quiet evening on a pleasant porch and a chance to sleep without dis-

turbing sounds.

To meet these requirements one needs a hotel in the residence section of a city, away from trolley lines; or, in the country or small village. The hotels listed in the guide books are those which advertise therein. I would gladly pay ten dollars for a hotel list made up solely on the actual merits of the hotels, based on the personal experiences of automobilists; rather than pay one dollar for a list which gives poor hotels which advertise, and omits good ones which don't.

Our experience convinced us that a heavy meal at noon is not productive of much pleasure. A stop at noon at a large hotel takes up a great deal of time, and the results don't seem to be worth the trouble. A dairy lunch, some sandwiches, milk or coffee, seems to answer all requirements, and lands one earlier at the night stop and in better condition to enjoy a hearty dinner.

Outside of the best hotels in the large cities, the best and cleanest food, served under the most civilized surroundings, is found at railway restaurants. We made it a point, wherever possible, to stop at railway stations for lunches. Indeed, many stations offer all the conveniences of a hotel—excepting beds—and may be used without ceremony or loss of time.

The average speed made, in miles per hour, for each day of the trip was as follows: 13.67, 12.05, 11.21, 11.45, 14.42;

while the average rate for the five days was 12.52.

With an automobile capable, as was ours, of making 35 miles an hour, this seems like a very low average.

The time lost in passing horses and in filling in directions omitted from the guide book, was enough to reduce the average speed by at least five miles an hour. Then there were many stops to look at an especially fine view, to pick some wild flowers, to take a drink from an inviting spring. But, beyond all other causes, we were a quiet family party, touring for pleasure. We took no chances and subjected ourselves to no discomforts. We accomplished without any strain whatever the runs laid out for the day; and each one of us arrived at home fresher and in better health than when we started.

In good weather the journey which we made in five days, could be made comfortably in four. While if time is no object, two weeks could be devoted to the trip, and every hour found interesting.

I have demonstrated to my own satisfaction that a party which doesn't start out to do stunts, can travel almost indefinitely over American roads with perfect enjoyment, and without mishaps. Indeed, after the first day, we took for granted the perfect performance of our machine, and the possibility of annoyance from it never entered any of our heads.

## Got a Reputation

William the Conquerer had just landed on English soil.

"But how," he was asked, "did you acquire your title?"

"I once made a balky motor run," he replied, with frank naïveté.

Perceiving that he was worthy of the name, they hastened to do him reverence.

## Diary of Melethone of Greece\*

By Kenneth F. Locktwood

Monday.—Landed in Rome to-day. Beautiful city, but can't say that I think much of the people. As I came through the country the natives took to the woods. Coming down the hill to the city, however, two fellows seeing neither horse nor other animal before my chariot thought it was running away of itself and manfully ran out into the road to save me. In justice to myself I must add that I shall send their widows a suitable compensation. Had an unobstructed entry into the gates and went straight to a hotel,

Tuesday.-The more I think of my invention the more swell-headed I become. But then it is pardonable to a degree. In our little mountain home, miles away from everybody, my wife used gasolene to cook with. The tank leaked one day and she took a light to find the leak. The subject is recent and I am tender on it still, but I feel almost certain she went the right way. When I saw the wonderful propelling qualities of the fluid I thought to myself, "If it can move so quickly a body of her weight, why can't it be applied to other bodies?" You see, I had resolved to go to Rome and I couldn't walk. Horses are very scarce in my region-due to the beef trust-and consequently in demand. I had to use Swarthmore, my 2.10 beauty, but what would you? One has got to live. I might remark here that I can't stand for mule. They kick so much in life that I'm afraid the habit would follow afterward. So, in order to get to the city I experimented with gasolene, accidentally hit it right, built my engine, fitted it on Swarthmore's light chariot, aded a guide wheel, and here I am.

Wednesday.—I have been seeing the sights. Last night I met a fly-looking guy on the street who asked me if I happened to have a rake in my pocket.

"Wherefore?" I asked.

"Shhh!" says he. "Don't tell anybody. I know a place around the corner where you can just rake money in."

"You don't say?"

"Come around and watch me."

Well, I went. There was a table with squares on it and the squares contained numbers. Also there was a big wheel divided off into squares containing numbers. A big man turned the wheel and it stopped at a certain point, when another man called the number. My friend placed a coin on a number and the wheel buzzed around. The man with the voice handed him two coins similar to his one. Then he put another coin down and again when the wheel had stopped he got two more.

"See how easy it is" he said to me.
"Now you stand here and play while I
go out and get that rake, for we'll need
it."

I haven't got a solitary sestertius left and the people at the hotel are talking about bills. It will break my heart, but it seems I have got to do it. I intend to see the man who runs this city and sell him my horseless chariot. If he will let me copy the pattern of the engine I may be able to make another. At any rate, I have got to have cash and there seems to be no other way of getting it. I would like to find that fellow who wanted a rake. My poor chariot!

Thursday.—I went to the place this morning.

<sup>\*</sup>If you don't believe this story, if you doubt one single statement in it, go to my friend T. Melethone, who lives in Rome, and ask him to let you see the manuscript which he has in his possession. The appearance of the parchment and the writing on it vouch for its great age, and if you are any kind of a scholar you will see at once that it is granuing.

"I want to see the Grasper," I said to the guard.

The fellow was an idiot.

"Who?" he asked.

"The Grasper, Grasper, Grasper!" I cried. "The man who runs this place!"

At that he opened his cavernous mouth and said to his fellows:

"Seize her, seize her!"

These Roman barbarians!

"I want you to understand I'm not a 'her,' " I shouted, indignantly. , you're not going to seize me, either!"

I thought he would go into convulsions.

"No, no, worthy sir," he said, presently. "He is a Caesar-Nero."

Then I remembered. I'm awfully absent-minded at times. But, then, there isn't much difference between Grasper and Caesar, after all, is there?

After a couple of hours they took me before him.

"Howdy, Nero!" I says, smiling pleasantly.

"Fair to middlin'," says he. "How're you?"

"Oh, so-so, but broke."

"Indeed," says he, taking out his purse. "Will twenty cents do?"

"Thanks," says I. "Fact is, Clutcher -I mean Caesar-I've come to see you purely on a matter of business. I want to sell you a machine."

"A what?"

"A machine-a horseless chariot cwn."

"Is this a joke, my friend?"

"Not at all. I couldn't bring it with me, but if you'll come round to the hotel I'll show you for yourself."

"Good enough,' says he. "I'm anxious. Lead on.'

When we arrived at the hotel I brought out the chariot and rode around in it several times.

"How do you like it?" I asked. "Bully," he replied.

"Then you'll take it?"

"How much?"

"Thirty-five hundred."

"Cents?"

"Dollars!"

"Say," he cried, "what's your name-Barrabas?"

"Nope. It's Melethone, from Greece."

"Well, you're as slick as it. Tell you what I'll do," confidentially, "I'll trade you Agrippa and twenty-five cents for it."

He must have thought I was green. "Not on your life!" I cried. "Give me thirty-four hundred for the machine and throw in thirty-four hundred for taking Agrippa and it's a go!"

I really thought he'd do it, he was

so long in replying.

"It isn't worth quite that much to get rid of her. I'll take the chariot at your figure."

"Good," said I. "Now to give you an idea of what this machine will do I'll take you on a short ride through the country. Climb in!"

And such a ride it was! Verily, I am not chicken-hearted, but I shiver sometimes when I think of it. We hadn't gone ten paces from the hotel when the people fell on their faces before Nero.

"Look out!" I yelled, but they didn't, and we bowled over a dozen or so. Nero clapped his hands in glee.

"Talk about tar and fire," said he. "Look, there's one standing up over there. Let's see you knock him."

From his dress he was some high mucky-muck and I refused. Nero, not to be disappointed, grabbed the wheel and churned the poor fellow into dust.

Rome was moaning with pain when that ride was over, but Nero was delighted. He paid me the cash and I took the chariot into his courtyard. Before I left he ordered me to come around early to-morrow morning and show him how to manage the affair.

Friday.—This was my unlucky day. I laid awake all last night wondering what mischief Nero would get into with the chariot. He has a wicked heart.

Without stopping for breakfast I flew to the palace.

'I want to see the Augustus," I said. "He's gone," the guard informed me. "Where—why—how?" I stammered.

"Toward the hills in the thing without horses."

I believe I nearly fainted. The next thing I knew I was flying along on the guard's horse in the direction Nero had gone. In my mind I could picture the great Roman stretched out dead under the remains of my wrecked machine. I pushed the horse to his utmost and he responded nobly. Was I too late? I shut my teeth and swore grimly beneath my breath. Nero? What did I care for him? It was my chariot I thought of as fences and trees flew by.

Suddenly a great dust cloud loomed in view half a mile in front of me, and presently Nero came tearing towards me. I stopped my foaming horse, climbed down and led him as far to the side of the road as I could. When the flying chariot was a dozen yards from me I shouted with all my lungs:

"Shut her off, you damn fool. You'll never make that curve." I had passed it on the way up and with all my experience I myself would have hesitated even at moderate speed,

But Nero was speed mad, and he kept on. The next second he hit the curve and the rocks along the roadway.

I waited to see no more—what did I care if he was dead when my lovely chariot was a mass of wreckage?

Oh, my poor machine! Oh, Nero, vou absolute ass!

Saturday.—Runners are tearing through the country with the news. He is not dead, but he has a bump on his head as big as a tombstone. I wish it

was his tombstone. Oh, my poor machine! They are hunting me everywhere. Nero wants to see me. I can guess why. When will I ever be able to return to civilization? This hut I call home is as disagreeable as a grave. Oh, my poor machine! I suppose I must make the best of my surroundings until I can safely get out of the country.

(The entries which follow concern Melethone's life in the woods and are of no special interest. The next entry we give was written some three months after the events chronicled above.)

This afternoon as I sat in the doorway of my hut cleaning some fish which I had caught two men came crashing through the underbrush. Imagine my surprise when I recognized Nero in one of them. He came straight towards me and it was evident he did not know me.

"Is this your house?" he asked.

"It is, good Nero," I replied.

"You know me, fellow?"

"Who does not?" I answered.

"True," he replied. "Here, take this bag of gold and lend me your room for a minute."

"Wherefore?" I asked.

"To kill myself," he said, wearily. "Do you not know that I am being hunted like a wolf, that it is only a question of time ere they will catch me and slay me. But"—and he smiled—"through your kindness I will outdo them."

My heart leaped with very joy.

"Then not one minute will I keep you waiting. Step inside, gentlemen; the house is yours."

"You seem glad of my death," he said, with some surprise.

"Frankly, I am. Do you remember one Melethone, from Greece? I am that one. Step inside, gentlemen; I hear voices."

"Melethone," said Nero, "I forgive

"But I don't forgive you," I cried.

"Three months have I lived in this hole. It was your fault—you can't cut your blamed throat too soon for me."

"Oh, Melethone"-

"Why didn't you listen to me that day? Poof, you were a fool! You thought you knew it all. If you had waited for me then, now you wouldn't be in this fix, for in my chariot none could have caught you. You could be half way across the world by this time. You might have defeated an army single handed with it. But no, you were a fool. Good day, Nero, and cut deep."

And as his companion raised the keen knife I banged the door and strode forth into the air a free man. But, oh, my poor chariot—my poor chariot!

## Increasing Air in Carbureter

Owners whose motors are provided with carbureters having automatic air valves, which being spring controlled open in proportion to the speed of the engine, may sometimes find that the engine as soon as the maximum speed is approached will proceed to fire back into the carbureter, check, and lose power. From the seat this will usually be put down to grit, but, upon close examination, it may be found that the gauze covering the opening in the automatic valve ports has worn, and worked up the valve spring, thus increasing the tension of the latter and preventing the valve from opening as fully as the high speed of the engine rendered necessary. Certain temporary relief will be found by risking the ingress of grit, through taking the gauze away altogether.

### Cold Weather Starting

Starting cars, especially large ones, in cold weather, frequently causes trouble. To obviate this, an excellent plan is to fill up the water supply with hot water, which will greatly facilitate the

starting. Another method is to place cloths round the inlet pipe close to the carbureter and pour hot water on them; if this is done, the engine will probably start about the second turn of the handle.

### Autoist (Another Kind)

Lawfully and carefully he rode,
The peer of knights and kings;
But now needs no motor car—
He's got a pair of wings.

### The Maid, the Verdict and the Result

The Plaintiff was a homely Maid
Of forty years, or more.
A motor car, it ran her down,
And she, of course, was sore.

The lawyer was a cunning chap Who liked contingent fees; He naturally advised the Maid To nurse her injuries.

The damages the Plaintiff claimed
Were modest as could be;
She asked for fifty thousand dollars
Because she hoped for three.

The experts were disint'rested,
So six they swore that she
Would die within a month or two,
Six swore the contraree.

The jurors, honest men and true,
They thought and thought and
thought;

And then "For plaintiff fifty thousand dollars" the verdict brought.

The jurors, tender hearted men, Before they sought their bed, Each one, he nobly went and asked The Plaintiff him to wed.

Alas! Alack! Alack a day!
"Twas ever thus in life!
They found the Plaintiff-Maid no more,
She was the lawyer's wife!

I. B. P.

## Indicating and Recording Motors

By Vincent R. Samms

NE of the first things to engage the attention of Watt when he had invented the steam engine was to find a way to keep an experimental account of the phenomena which took place in the interior of the cylinder, and he invented the indicator which is still in use at the present day. This instrument has remained identical in principle with the one invented by Watt, and it has only been perfected in certain details of construction. It cannot be denied that the careful indications given by this apparatus have been the starting point for the continuous improvements which have taken place during the 19th century in the construction of steam engines.

In the case of explosion motors, and more especially gas motors, the development of which has made great strides during the last fifteen or twenty years, it must be confessed that Watt's way of investigation has been somewhat neglected, and many builders of gas motors consider the diagram apparatus as a piece of mechanism which gives but vague and consequently rather useless indications. This opinion would seem justified to a certain degree, inasmuch as the constant variations in the initiatory' power of the explosions produce corresponding changes in the form of the diagram, and the deductions to be drawn from them concerning the conditions of regulating the motor are difficult to determine with exactitude.

Still, the difficulty is not insurmountable, and if care be taken to take simultaneously the diagram, with the aid of the indicator, and the graphic with the aid of the explosion recorder, all the necessary elements will be given to follow the workings of a motor with certainty. When the speed of the motor

exceeds 400 to 500 revolutions, and this is the case with all the motors used for automobiles, Watt's indicator can no longer be utilized. Unity of the alternating motion with the piston is not realized under these conditions, and the diagrams which are thus obtained are illegible and inexact.

Then, too, the construction of automobile motors has been from the very beginning, so to say, at hazard, for want of a practical method of investigation: the old-fashioned indicator did not suit the increased speed and recorders were little known. It must also be remarked that a goodly number of builders of steam engines, gas motors and automobile motors do not appreciate the advantages to be derived from the use of indicators and recorders; they use them very little, or not at all. The business cares connected with the sale, and the haste required to fill hurry orders on the shortest notice, absorb the activity and energy of the workmen, and the study of perfecting the style of motors adopted is put off from day to day. If a machine works imperfectly it is tinkered with at haphazard to get it to work by some means or other, and only in the last instance, when there is no other remedy possible, recourse is taken to the investigating apparatus. Most of the time, too, for want of the skill which the constant use of an apparatus gives, the engineer or foreman set to use it meets with certain difficulties which he cannot explain to himself, and, obtaining but indefinite or erroneous impressions, concludes that the apparatus is useless.

Before proceeding to examine the recorders it is necessary to insist upon their indisputable utility, and to remark that no matter how high the price, these

recorders render such services, where used in an intelligent and rational manner, that what they save on costly and uncertain experiments will soon prove the economy of employing one of these useful labor savers. Automobile builders anxious to improve the efficiency of their motors should place into the hands of their engineers, foremen or chief workmen, recorders for testing the motors; and it is owing to this wise precaution that the German manufacturers, in particular, have improved the construction of gas motors to such a marked degree that the specimens of motors shown by them at the late exposition at Duesseldorf have astonished all who saw them in operation, by the regularity and steadiness of their motion, which proved the most perfect economizing of the power employed.

To determine the working of highspeed motors use can be made of two different devices-the manograph and the continuous explosion recorder. As these two devices have so often been described in various publications, a closer description of them here would be unnecessary, but a parallel between them is interesting.

The manograph, invented by M. Hospitalier, is an optical device: it reflects on a glass a succession of superposed diagrams, somewhat like Watt's diagrams, and the persistence of the images on the retina of the eye is such that it affords a continuous and certain, but at the same time, temporary tracing. It is, nevertheless, possible to photograph or to trace the diagrams thus obtained.

The recorder is a mechanical device supplied, for one thing, with a roll of paper which unwinds by a clockwork movement, and, for another, with a piston, a lever, and an ordinary tracing indicator. The apparatus gives permanent tracings representing a succession of open diagrams, reproduced in exact order, with all the variations corresponding to the different degrees of pressure of the various cycles.

The tracings obtained by the manograph are not deformed by the effects of inertia; those of the recorder, on the contrary, are slightly falsified in this manner, but this inconvenience can be greatly modified if the springs are judiciously chosen and the motion carefully regulated.

The optical diagrams are detached and without any trace of connection between them, the rapid superposition of the images giving in reality but one average outline of the several diagrams. The recorder diagrams are continuous and allow one cycle to be compared with another, regardless of their distance from each other, in such a manner that the phenomena recurring at stated intervals can be fixed, and consequently satisfactorily explained. The optical diagrams can be measured by a planimeter, the graphics cannot.

The manograph is delicate and difficult to handle, and the art of recording its impressions is not free from complications. The recorder is strong, easy to manipulate, and can be left in the hands of a foreman or a simple workman. All the graphics can be preserved in order to compare them with those of other motors, and it is just here, viz., in the comparison of results under different conditions, wherein lies the possibility of drawing useful conclusions for fixing the conditions necessary for the regulation of the motors.

It will be seen from the preceding how the two devices between them can be made of value to all builders of motors.

### A Comparison

Most gossips like unto scorchers are.

Deserving of our scorn;

For while they run their neighbors down They also blow their horn.

# Putting Away for the Winter

ALK as you will against the futility for doing it, cars are laid up for the winter and they will be laid up as long as they are things of popular favor. Of course, there is really less reason why an automobile should be stored away in bad weather than there is why a horse should be kept in the

stable during the off season, but you can't convince a lot of people of this and so as soon as what they arbitrarily term "the season" has passed they begin to get ready to lay the vehicle up until next "season." As long as this is done and will be it is just as well to go at the packing away in camphor in a regular and systematic fashion. The most satisfactory manner of doing all this will be found to be somewhat along these lines.

The engine, transmission gear and other metal parts should be gone over carefully. The engine should have kerosene run through it by injecting it into the cylinders and crank chamber. Several

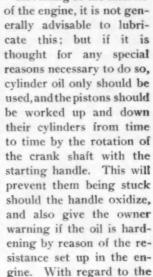
turns should be given the starting handle so as to spread the kerosene as much over the interior of the crank chamber as possible. After allowing the engine to stand for a few minutes, open the draincock and permit the kerosene to run off. Repeat this operation until the kerosene flows from the crank chamber as clean as when it was put

Next give the outside of the engine

a thorough cleaning and scrubbing. To do this properly use a stiff bristled paint brush and kerosene. After this treatment the engine should be wiped over with a clean dry rag. As aluminum is affected by the atmosphere, particularly near the seashore, where the air is often damp and heavily laden with salt, it

would be advisable as a protection to all the metallic parts of the engine to paint these over, and for this purpose some special form of paint is necessary.

Reverting to the interior of the engine, it is not generally advisable to lubricate this; but if it is thought for any special reasons necessary to do so, cylinder oil only should be used, and the pistons should be worked up and down their cylinders from time the crank shaft with the starting handle. This will gine. With regard to the



valves, these might be removed with advantage in some instances; and if the exhaust valves are removed, the bottom end of the guides should be plugged to prevent the ingress of dust and dirt.

The change speed gear should be washed out with kerosene in a similar manner to that employed for the engine. If the car is a direct driven one, the bevel gear case should be filled with grease, there being no necessity to clean



An English Motor Costume

this out, though it would do no harm if it were washed out with kerosene and fresh grease put in. Returning to the change speed gears, the gear box lid should be removed, or probably in many instances it would be better to remove the top half of the gear box completely so as to expose the gear wheels contained therein. Good lubricating oil should then be applied to the gear wheels by means of a brush. For this purpose cylinder lubricating oil would probably be the best medium to employ, as it would not be so liable to oxidize as many of the cheaper lubricants are sure to do.

All the pins, joints and connections should be well oiled; in fact, it would be better to remove these, cleaning them thoroughly and replacing them, having previously given them a good coating of vaseline. The wheels should be jacked up and removed from their axles, these and the axle boxes being cleaned out and well greased before replacing.

When going round the car, attention should be given to the anchored ends of the carriage springs; also their shackles, these being well greased. These are some of the points which are particularly liable to be overlooked when going through the process of overhauling and cleaning.

Where chain driving is employed the chains should be removed from the sprockets and well cleaned in kerosene, after which they should be immersed in melted tallow and be allowed to remain in this for several hours. Remove the chains, hang them up to allow the superfluous grease to drain off, and then fold them up and pack them away in greased paper until they are required again.

When you have done all of this you may rest content that you have done all you could do to give your car the rest you somewhat unwisely, I think, imagine it needs in what you call the "off season."

# The Backward Look

By Ten Broeck Browne

When grandpa reads about the way the business men combine

And raise the price of this or that, along their special line,

He shakes his head and takes his pipe out of his mouth, and says:

"I dunno what we're comin' to in these new-fangled days;

We uster be content to live like those from whom we sprung,

But now it's mighty different from the time

When I was young!"

When father picks his paper up and reads about some swell

Who buys a touring car that costs ten thousand—well,

He kind of wriggles in his chair, and then he slaps his knee And swears the world has lost its mind, as far as he can see:

"We used to have as good a time," he says, "out there among

The poor folks in the country—where I lived

When I was young!"

In years to come, when we are old, and airships fill the sky

And radium autos dash about—when motoring's twice as high,

We'll have this satisfaction; we can call our children 'round

And say about what grandpa said, and know just how 'twill sound:

"This pace is far too swift for me; too hurried and high strung—

We didn't scorch at no such pace, my boy,

When I was young!"

# Oiling and Its Importance

By James R. Finney

as to be now an accepted fact that it is "money that makes the mare go," it can be accepted as even more true that in the case of the mare's successor, the motor, it is oil which makes it go. This is true in more ways than one, but it is truer of it in a lubricating way than in any other, wherefore it becomes highly essential that the owner of an automobile should know how, when and where to lubricate, and knowing should religiously perform what his knowledge has shown him must be done.

Neglected or improper lubrication may result in very serious consequences, not stopping short of even a total breakdown of the engine. Ordinary gas engine oil should be avoided, being quite unsuitable for high speed engines. Oil of a very high flash test and free from deposit at high temperatures is the most suitable. With the pump system of lubrication it is preferable to oil often and in small quantities; half a charge every fifteen to eighteen miles will be found to give about the desired results. With the drop feed system the lubricators should be set to give from five to six drops per minute for each cylinder.

into each cylinder of the engine and give the motor a few sharp turns by hand; this will remove all "gumminess" from the cylinder walls and prevent the piston from sticking. After the car has run about 500 miles, remove the sparking plugs and wash the engine out thoroughly by injecting about a wineglessful of kerosene into each cylinder; after turning sharply by hand for a few minutes remove the plug from bottom of crank case and allow all the waste oil and kerosene to drain off completely. Before starting the engine again it will be necessary to put about half a pint of lubricating oil into the crank case of a single cylinder engine, three-quarters of a pint into a double cylinder, one and a quarter pints into a three cylinder, and three pints into a four cylinder one, This may easily be done through the examination hole in the crank chamber. The air regulator of the carburetor should not be altered after it is properly set; the engine starts more easily on a rich mixture, which can always be

tice to inject a teaspoonful of kerosene

attained by slightly flooding the carburetor.

Should there be a loss of power in the engine the following points should be ex-



MILITARY MOTORING AT THE RECENT MANEUVERS AT MANASSAS

amined for the cause: leakage at either the exhaust or inlet valves, sparking plug, or piston rings, weak batteries, dirty sparking plugs, imperfect contact at the contact breaker, caused by a weak spring in the contact arm, or by carbonized oil on the fiber disk and contact pieces, or burning of the platinums on the trembler of the induction coil. The latter may be cleaned by removing the screw and trembler blade, and dressing up the contact pieces perfectly square to ensure proper contact when replaced. To insure this throw on the switch, put the contact breaker in position to close the circuit, then adjust the screw to the blade till the greatest possible vibration of the trembler is attained, then lock the screw in position by means of the locking nut. When making this adjustment it is most important that the sparking plug wire should be connected to the plug and the plug to the cylinder since should this be neglected there is every likelihood of the coil being injured by burning.

Should misfiring occur, examine the sparking points, to see whether they are clean and the proper distance apart (about 1-32 of an inch); see that the porcelain of the plug is not broken, all terminals of the wiring properly tight and clean, contact breaker clean and properly adjusted, batteries not less than four volts and all parts of the wiring, which are likely to come in metallic contact with the framework, properly insulated. A most successful method of finding a short circuit is to put the car in the very darkest place obtainable and start the engine, when any leakage in the electric circuit will be easily found, a dull blue flicker showing up bright in the dark although quite imperceptible in the light. Do not discharge the batteries below 3.8 volts. Although it is possible to run on less than this it is most injurious and shortens the life of them. Examine the batteries frequently to ascertain whether the top of the plate is well covered with the electrolyte; if the top of the plate is visible add only pure distilled water to cover it.

About once in so often it is advisable to run off about a cupful of gasolene from the carburetor end of the feed pipe, which will result in removing any water that may have gathered. The gasolene in the carburetor should also be allowed to run off, and the carburetor itself taken down and thoroughly cleaned out about every three months, since it is most essential that it be kept clean and free from water or grit.

If the clutch should "slip" it may be due to oil getting on the face of the leather. This should be washed off by pouring gasolene through the hole in the friction clutch drum or fly-wheel, a little fuller's earth being applied afterwards. The clutch should not be allowed to slip for any length of time, or the heat thus generated will burn the face of the leather; when this takes place it is best to have the leather replaced at the first opportunity. Remember to regularly oil the friction clutch bearing. Don't give more than a few drops to this because when too much oil is used it will find its way on the leather face of the clutch.

A charge of oil should be given to the ghar box about every 200 miles, and all the actuating levers should be kept well lubricated and working freely, so that the gear can be changed without any "sticking" in any of the joints. It has been demonstrated that the wear and tear of the gear box is almost always all due to bad manipulation; it is of the utmost importance that drivers should acquire the knack of changing gear without jar or noise. To do this properly, the left foot pedal should be depressed, and the change immediately

made by the hand lever; no force is necessary, but the lever should be quickly and lightly moved from one notch to the other. The gear should never be changed from a high to a lower speed until the car is moving at approximately the rate of the lower speed.

When descending steep, dangerous hills, it is best that the descent be made on the second speed, or even the first speed, if the hill is very dangerous. In this way the car cannot run away, while the brakes are reserved for any emergency. Of course, ordinary hills can be descended with the engine running free. Never allow the car to get out of control, but always know that it can be stopped immediately, if necessary. The brake power provided on most machines is now more than ample, but nevertheless it should not be abused. When driving in the ordinary way allow plenty

of time to stop, because sudden application of the brakes is injurious to the mechanism, and should only be resorted to to avoid accidents.

The rear axle should have a charge of solid oil about every 500 miles, by means of a force pump supplied for the purpose. A charge should be given to the gear and also to each of the axle tubes through the screw plug holes. The front wheels may be very efficiently lubricated with grease, the outer cups should be filled up, and by screwing these home the grease will be forced right through the bearing. The steering gear should be oiled every 100 miles. All the mechanism of the car should be kept clean, and all joints regularly oiled. This may all seem like a lot of bother, but it is the price you must pay for a safe, smooth-running vehicle, which you can get in no other possible way.

## What Is the Best Size of Wheel?

By Prof. Jules Demorest

THEORISTS have often attempted to determine by calculation the question of the size of wheels for motor cars. Unfortunately they are not even agreed upon the data upon which their calculations are based. Some consider the draft inversely proportional to the square root of the wheel diameter; others claim it to be inversely proportional to the wheel diameter itself. It appears, in the author's opinion, that the latter are correct.

The results obtained by Morin are in accordance with those of Coulomb, who was the first to establish the laws of friction, and these results are based upon a large number of experiments conducted during several years with various types of vehicles and wheels. In the work of Morin on the draft of vehicles may be found tables containing the re-

sults of 170 experiments on the influence of the diameter of the wheels, 267 on the influence of the speed and 175 on the influence of the width of the rims.

Dupuit, on the other hand, made only a small number of observations deserving any confidence, a total of twentysix, and these observations were made on wheels of only five different types. It is therefore generally admitted, with Morin, that the traction effort is inversely proportional to the wheel diameter, proportional to the vehicle weight, and independent of the width of tires within certain limits.

Starting with these facts as a basis, it is possible to calculate the most advantageous wheel diameter for ordinary vehicles carrying a given load, the nature of the surfaces in contact being de-

termined in advance. While this may be an excellent exercise in algebraical calculations, it has no relation to the actual problem, on account of the multiple hypotheses which it is necessary to make, and, as might be expected, the calculation gives the most varied results. The problem is still far more difficult to solve for automobiles. It should be remarked that the experiments of Morin, however much confidence they may deserve, were made exclusively with steel-tired wheels. To apply their results without reserve to driving wheels fitted with pneumatic rubber tires would be somewhat risky.

All authors agree that the friction of rolling motion diminishes as the diameter of the wheel increases, and in ascribing this phenomenon to the variations in the extent of contact surface between wheel and ground, it has too frequently been overlooked that with pneumatic tires of similar construction, and with a given weight and a given pressure, the contact surface between the tire and ground is constant. It is therefore to be concluded that for roads which are not too much cut up the draft is independent of the wheel diameter within reasonable limits. Another fact to be considered is that in motor cars the use of wheels of large diameter necessitates a greater ratio of speed reduction from motor to road wheel, entailing greater friction losses. In increasing the wheel diameter the loss may therefore be greater than the gain, and the excellent results obtained with small directly driven wheels substantiate this possibility.

It would appear that the wheels at present employed, mostly 32 or 36 inches diameter, leave little to be desired from this point of view. The range of possible diameters is, moreover, limited by all sorts of considerations, among which only the desirability

of having all four wheels of an automobile equal in diameter may be mentioned. This consideration fixes the upper limit of the diameter, as with very large front wheels the car could not be turned in a sufficiently small radius. On the other hand, the weight and frailty of wheels increase very rapidly with the diameter. It is needless to insist upon the increase in the price of tires.

There is, therefore, little probability that anything could be gained by increasing the wheel diameters actually used, and there is no more probability of anything being gained by reducing them. Wheels of 28 inches diameter, commonly used on bicycles, surmount even small obstacles, such as a street curb, with great difficulty. Such wheels, of course, possess greater structural strength than those of large diameter, but the tires on them wear out more rapidly. The argument that an increase in diameter might have an influence on the speed of racing vehicles merits little consideration, as at racing speeds the air resistance is so much greater than resistance to rolling motion.

#### The Limit

Quite a Few less than a Million Years Ago there was a Sporty Kid who Hit Up his Hot Air in Slang. He splathered in Motor Idiom. He joshed about in Automobile Simile.

His Gab grew so Queer that finally they gathered him into a Funny House, and he is now doing the Ballast Act in a Padded Cell, emitting College Cries and other Nursery Rhymes.

Moral: Beware of the Limit.

### Never Too Much

Although the fates may seem unkind And we weary of the strife, We never kick at the "dust" we find In the broad highway of life.

# Deacon Benson's Bargain

By Dorothy Hopkins

HE charity fair at Bay Rock was over. It had been wholly undenominational, purely humanitarian, conducted with the sole purpose of keeping the funds in the treasury of the Good Samaritan Hospital equal to the demands made upon them. Bay Rock people had their own way of answering the question, "Am I my brother's keeper?" The last trifle from the "Vanity Booth" was sold, the last morsel in the "Commissary Department" had disappeared, and at every corner was the same encouraging emptiness. The sales had been rapid and wholly satisfactory. Nothing remained now to complete its history but the drawing of the first prize-an automobile-presented by the Odd Fellows of Bay Rock, and upon which had been sold a thousand onedollar tickets.

As preparations for the drawing began, an interest that fell little short of excitement was everywhere apparent. Twenty-five duplicate tickets were now placed in a box, shaken together and duly presented by the chairman of the prize committee to twenty-four little fairies appearing on the scene; their Queen coming last withdrew the remaining one, which was thereupon declared to be the winner. The manager of the sales glanced hastily over his list of names and then announced, "No. 1776—held by Amos Benson."

There was an instant's hush, followed by a wave of applause that shook the "auditorium." A voice from the crowd shouted, "Good luck to the Deacon." This was quickly taken up, and the cries, "Where's the Deacon?" "We want the Deacon!" "A speech pays for the automobile," were heard on every side.

Under the gallery far in the rear, with hat drawn over his face and eyes

twinkling with grim humor, the Deacon was at last located. Forthwith, much against his will, he was escorted to the stage where the Fairy Queen with all the unstudied, dainty grace of childhood, tendered him the lucky number. Like a knight of old, he dropped upon one knee and gallantly carried her hand to his lips. Again they cheered and called, "Give us a speech." Reluctantly the Deacon turned and faced the audience.

"Friends and neighbors, good evening," he began. "I could talk to each of you separately and alone, ladies included, and not be at a loss to know what to say, but with all of you before me at once and the talking to be done by myself makes me feel like the thief in prison, of whom the good lady visitor inquired, Young man, why are you here?' 'I took risks, Marm, and they turned out different from what I expected,' he replied. 'And aren't you shocked at the consequences?' she asked. 'Yes, Marm, I ain't savin' I wan't purty consid'ble s'prised at bein' cooped, but you see if I'd a' known how things was goin' to turn out, I'd been prepared for it and postponed bein' there.'

"I'm not averse to winning the automobile," continued the Deacon, "but if I had supposed my ticket was going to coop me on this stage as a speechmaker, I'd probably have postponed being here. My trying to make a speech is very much like trying to hatch chickens from china eggs—not much comes from the effort. The only time I ever had a call to the pulpit was when Nancy and I went together, and the only lecture I ever delivered was on the platform of the milk wagon at home, after two boys and a goat had tipped the can off and I had lost a hundred and forty-

four quarts of milk, and all my temper. I never once tangled the thread of my discourse, and Nancy had to tell me when to say 'Amen.'"

The Deacon paused and passed his hand over his bald crown as if in search of an idea. "And that reminds me," he continued, "that this fair is closed and I cannot add to its success by prolonging my talk. But right here allow me to personally commend each one of you who has labored so untiringly for the success of this undertaking. Each department has shown thorough preparation, the results speak for determined action, and the object that has united your efforts is eloquent with the Nazarene spirit. When I have mastered the art of automobiling, I hope to share the pleasure of my prize with many of you. Good night." The Deacon left the stage amid the clapping of hands, while the band played its final selection; and then confusion reigned supreme.

"I say, Deacon, I speak for the privilege of teaching you the soul-inspiring art; I'll be over in the morning," shouted Andrew Thornton, Bay Rock's progressive automobile agent, coming up a little later to where Amos Benson stood in the midst of a group of admiring friends.

"All right," responded the Deacon, heartily, "the contract is let; but really," he continued, "I can't get used to thinking that I am the one man envied by all Bay Rock. I've been with Nancy to all kinds of charity shows and bazaars (where it seemed the women had just racked their brains to find some new way to pick a man's pocket honestly), but I never before drew anything that wasn't just naturally a woman's. I've drawn lace handkerchiefs, back-combs, face powder and kitchen aprons; and, of course, Nancy always confiscated them instanter."

"You were fortunate to escape that

way," remarked Attorney Van Eton, who was one of the listeners; "my wife has confiscated me bodily during this fair. She has sent me on clues that have led into preserve jars, others have rounded me up in some kind of a pickle, and still others ended in culinary mysteries that would puzzle a Pinkerton man."

"That's just it," interrupted Mr. Thornton; "the trouble with these entertainments is they're too one-sided. The exceptional success of this one is accounted for by our swinging into line and making some features mannish and practical to ourselves. We like the pie and cake, the ladies and their furbelows—couldn't get along without them, in fact—but, there's two things that interest a man mightily—whatever affects his pleasures, or concerns his bread and butter. That automobile the Deacon has just won will do both; its practicability saves"—

"Oh, come, Thornton, you've reached fourteenthly'—stop; everybody knows you are talking shop now. I bought one of them to get rid of you the other day," and Doctor Barnes, the house physician at the Good Samaritan Hospital, slapped the enthusiastic salesman good naturedly upon the shoulder. "We'd any of us been glad to have won the machine, but so long as we did not, we are glad to see the Deacon its possessor."

"That's so," "Straight goods," "The truth," were some of the expressions heard nearly in concert from bystanders, and the Deacon, in the seventh heaven of delight over his good fortune and these friendly assurances, passed cigars and went home.

Deacon Amos Benson was one of the representative men of Bay Rock. Successful in business, a student of human nature and events, yet these characteristics did not dwarf his powers of sym-

pathy, or his susceptibility to benevolent influences; his purse-strings were never knotted against the needs of humanity. "Time had flown over his head and left its shadow behind," but that shadow had not served to dim the spirit of kindliness that illumined the depths of his deep blue eyes. His steps were not as elastic as before rheumatism and gout had rendered them uncertain, but his footprints were never found in moral by-paths. He gave ungrudgingly of the best within him, and the world smiled back its return of good will for good will given.

True to his promise, the following morning Andrew Thornton appeared at the Deacon's door proudly operating the new automobile. Being nothing less than an enthusiast upon the subject of this newest means of transportation, the pleasure anticipated in the society of this new pupil was plainly visible in his aristocratic face. They glided smoothly over Bay Rock's well-kept roads until the Deacon suggested a change; then they whirled away on country roads, climbed hills and sped along, breaking speed laws on some of the delightful levels or passed snail-pace some fascinating bit of scenery. Long before they again drove up to the Benson doorway, the two men had exchanged places and the Deacon was manifesting some of the complacency of the successful chauffeur.

"And hain't you tipped over once nor nothing?" inquired the Deacon's house-keeper as she threw open the door on their return, with a half-concealed anxiety that was almost incredulous even in the face of the Deacon's animated appearance. "I more'n half expected to see you towed back with a hawss an' come in splintered an' neck-broke, tank busted an' all gone to smash!"

"Well, you see, I'm not damaged to the extent of a muskeeter bite," he answered; "and I tell you, Lucindy, this morning's ride has almost made a boy of me; I've lost much as ten years somewhere on this trip. If Nancy hadn't liked the bays so much, I'd be quite reconciled to parting with them now. But say, have you got dinner ready? We're as hungry as Injuns-come in, Thornton—I wish the Israelites had some of these machines to have helped them out of Egypt. Keep your sunshade handy, and we'll go after your Joe to-night and s'prise him, Lucindy," but that good woman betook herself to the kitchen muttering something about the deacon "being gone out of his head."

The next few days the Deacon did little else than stand by the window and watch the rain which fell in provoking torrents, vainly longing for the pleasure of another automobile ride. When the sun again appeared he joyfully sallied forth; but, having arrived at that time of life when memory played him sundry little tricks, Mr. Thornton's directions, which had produced such perfect results before, were many of them now confused or forgotten altogether. Because of this fact he reached home on at least two occasions with a twinge of disappointment tugging away at his courage. But with characteristic perseverance he continued trying to learn.

It was an eventful day that led him into the country skirting "King Mountain," where he was as familiar with the people as with the lay of the land. "What's the matter, Uncle?" asked a pleasant voice with a note of resource-fulness in it, and the Deacon looked up to find a tall commanding figure, wearing a light-gray hunting suit and cap, regarding him kindly, though half mischievously.

"I don't know," he answered, simply, "laugh if you want to. You see," he went on, "Lem Shaw was coming with his colt which was cavorting 'round

afraid of me. I tried ot get out of the road and stop—and I did. The machine jumped that ditch, knocked down the fence, and I woke up on this pile of stone. Since I got over the effect so's I could, I've been studying on the cause. I don't know when Lem went by, or what happened to him."

The stranger examined the automobile when the Deacon stood by, interestingly observing. "There's nothing broken," he ventured, "but—ah—I see, you must have been excited"—looking inquiringly at the old man; "the tracks show you were headed directly for the ditch, so you must have pulled the lever instead of setting the brake. To offset this you probably operated the emergency brake unconsciously, and the dead stop at high speed was sufficient to throw you."

"And you think that's the how of it, do you?" the Deacon asked; and he was, of course, answered in the affirmative.

"Well, that settles it, then! If I've got so old and rattle-brained that a scairt colt upsets my common sense, I'll sell that consarned patent arrangement and get me a blind mule to drive!"

"Don't be too hasty," counseled the man in gray; "wait until you understand it as you do your horses, and you will scout the idea of parting with it.'

"No, I won't; this isn't the first time I've been an old fool. Only the other day something excited me, and I ran down the beach into the bay, and there I had to sit till Tim McCormick hitched his team on and pulled me out. The first time I got stuck on the road I telephone five miles for help and paid a man three dollars to come out and inform me I'd set the brakes and stopped it myself. It's been me every time, and now she goes to the first man who will buy." The Deacon's tones

were determined, and a feeling of selfloathing seemed to father them.

"What's your price?" asked the other., It was the one question that held the power to restore Amos Benson's mental poise instantly. His keen relish for a "bargain" came to the rescue, and he was himself again. "Well, brand new and worth a plump thousand, but," he added, meditatively, "she's stole my self-confidence, made me an object of ridicule and purty night made a cussin' sinner out of me. That's against her, considering everything, so I'll let her go for six hundred and fifty-want to buy? I'm Amos Benson-'Deacon' for short; and you're a newcomer hereabouts, I take it?" he inquired.

The stranger twirled one end of a silky moustache, quite aware that he was now dealing with something more than a discouraged automobilist. "Yes, sir, an entire stranger, Hendrix Mac-Vey—broker—of Upton, Chelsea county—the width of a State between me and my home," he answered as he handed out a card. "I'm also the new proprietor of Summit View Camp' on King Mountain. But, would you object to real estate in lieu of cash?"

"Well, now, that depends," replied the Deacon. "I'm not hankering for any cat-tail swamp or thistle beds, but land that'll yield something besides disappointment is worth looking into. If she don't carry so much surface water she's out of sight, I might think about it.

Where's your land located?"

Here followed a description of the property in question, which seemed to satisfy the Deacon. "And you're willing to swap two acres of land, a house and hen coop for that automobile, are you? Well, sir, look her over sharp; don't take her if she doesn't suit. I don't want you coming back to tell me I sold you a ring-boned, spring-halt, spavined old vehicle. We'll test her wind, and if you

say so we can go straight to lawyer Van Eton for a contract. Don't suppose you'll object to giving references, same as myself?"

When the automobile again stood in the highway—somewhat marred but its running gear' intact—the two men settled themselves upon the cushions, Hendrix MacVey acting as chauffeur. "Well, I guess you aren't a stranger to this business even if you are to me," remarked the Deacon, when several rods had been covered and he was holding onto his hat against the breeze.

. . . . .

A few days subsequently the exchange was completed, Amos Benson pocketing the deed to a "parcel of land" in South Upton, while MacVey was the satisfied purchaser of the deacon's automobile. "Come for a farewell trip," the new owner pleaded, and the former owner consented, only to become amazed almost at once.

"Why—why—where are you going, man? Don't you know that is the King Mountain road?" and the Deacon laid a restraining hand on his companion's arm as they turned from the main thoroughfare upon a trail which wound among the mountain pines and birches, and up which strong teams toiled laboriously with their buckboard stages bearing passengers or supplies for the various camps along the route.

"It's the very road I want you to travel with me. You have lived here a lifetime and yet have never seen the valley in all its beauty from Summit View. This pleasure seals our bargain."

"Ain't you purty close to the edge of that bank?" anxiously inquired the Deacon; "better shy off this way," and he slid to the extreme end of the seat, prepared to jump at short notice. But he waited in vain for the occasion that should require it.

Like the beating of some giant heart,

the regular teuf-teuf throbbed out its message—"I'll take you there"—the wheels turned steadily around and, guided by a skilful hand, crept unerringly up the long ascent. At Ledge Crest, the first camp, the visitors flocked to the verandas in astonishment as the two went by. At Midway House they rushed to the clearing to watch their progress, but at Summit View a great shout went up as the tourists reached the level and paused. The Deacon drew a long breath of relief.

"I say, MacVey, that was well done, but my heart wouldn't beat any faster if I had walked every step. I've pulled the whole load in by imagination; it's worse than following a plow; I'm clean tuckered out. How are you?"

"Calm as a June sunrise," answered the other; "look about you and become enraptured."

"Well, I vow, 'tis a picture and no mistake; hain't no danger of the clouds knocking your hat off, is there?" he asked, looking up. "Are you going to walk down, or have you got a parachute handy?"

"We go back in this," returned Mac-Vey, with a determined smile.

"Not we: I walk!"

Dinner and a long rest restored the Deacon's nerves, still he insisted on walking down the mountain. "Goodby, I hope to see you at the bottom," and he started briskly off on foot as MacVey entered the automobile alone.

"Any time you are tired I will stop and take you in," said MacVey, coming alongside the self-decreed pedestrian. The Deacon stared incredulously as the automobile continued abreast of him. "Do you mean to say that you are going down hill that way? I didn't expect to recognize you when you went whizzing past. If I'd known that tarnal animal could be so docile on the down

grade, you'd never got her for six-fifty, no siree! Here, this is all 'folderoll,' my walking this way; let me get in before those Midway folks see me making a fool of myself. There—I'm ready—go on;" and for the remainder of the descent the Deacon braced his feet and clutched the back of the seat, but tried to look as becoming a man accustomed to automobiling.

Later in the fall he chanced to meet the manager of Summit View. "Hello, Deacon, glad to see you; hain't been to camp meeting lately, have you? Well, I tell you that MacVey is a hustler for sure. He's hired the stones thrown out of the road full length and the ruts filled in, till it's the prettiest piece of highway you ever seen. That automobile has just cantered down and back like a racehorse and kept the camps plumb running over with boarders the whole time.

"Why, she's a regular freight-and-accommodation train all by herself. If it
was New Yorkers or a bag of beans,
a hundred-weight of sugar or a county
judge, or both or altogether, she
brought 'em; never had such a season
in all my experience. You don't know
of anybody who wants to buy a good
team of horses, do you? We haven't
any more use for ours. But I must be
going—come up and see us;" and then
the marager was gone, leaving the Deacon to ponder on the ways of advancing
civilization.

### Kind He Wanted for Himself

It is all in knowing how. A man who, as most men do, thought he owned the worst automobile in all the world, went to a friend who was an advertising agent and asked him to write him out an advertisement of the vehicle so he could insert it in the For Sale columns of a pa-

per. When the agent read the notice to him he said: "Read that again." After the second reading, he said: "I believe I'll not sell. I've been looking for an automobile of that very kind for a year back and didn't know I had it until you described it to me."

### And They Arrested Him

Peter Minuit had bought the island of Manhattan for \$24.

"No," remarked his wife, "I don't think it is a bargain at all. You didn't get any automobile license with it."

Perceiving he had been buncoed, he relapsed into sulky silence.

## Force of Habit

"Did you hear the joke on Snaffleton, the reformed scorcher?"

"Yes; he tried to water his horse with gasolene."

#### An Absolute Ruler

See the policeman, where he stands,
Impressive, proud and fat.
He checks the automobilists
And lays the law down flat.
They mind his stern, uplifted hand,
For he's an auto-crat.

### A Consolation

If all automobiles were perfect, Without improvements need, We'd all have nothing more to do, Which would be dull indeed.





WHILE seated at the dinner table in the Mt. Washington Hotel recently, a man who was dining at the same table started in to introduce himself to me. Why he should have done this I am at a loss to know, as I wore

none of the distinctive marks of an automobilist, and do not believe I smelled of gasolene, as I was wearing evening dress, and thank goodness they haven't come dressing that way yet while driving an automobile, but judging by the inappropriate costumes that are worn there's no telling what will come next.

"Do you own an automobile?" said he to me, eyeing me sharply. I did not reply for a moment as my mouth was full of something very good, and that gave him a chance. "I know you do, you look

guilty;" and then I told him I owned a little one with two wheels. "Well, if you have as much trouble as I do you will be either long suffering or you will commit murder," said he. I neglected the next course in order to hear his story, and he went on telling it

with a pained look and words of bitterness which were supplemented by his wife. He said: "I own an automobile. but the most expensive thing I own is a chauffeur." "You ought to discharge him," his wife observed, as she peeked at me from behind a forest of celery. "Hang him!" I muttered under my breath. "My machine," the man went on, and he was a most pleasant looking sort of man, too, "is a Pope-Robinson; it was not convenient for me to make the trip all the way by automobile from Boston to Bretton Woods, as I had an engagement in Boston, so I was to join my driver and machine at Portsmouth. I told my driver to proceed there and in doing so to be careful not to drive too fast. When I got to Portsmouth I found him waiting for me with the

usual long face he wears when something happens. I did not have to ask him what was the matter, as he informed me that he had broken one of the springs completely through all the leaves and of course supplemented the information with the statement that when he did so, he was going slowly and carefully. Now, I had figured on a nice trip the rest of the journey and here I found myself at Portsmouth with a broken-down automobile and the last train departed. I thought of one of the ten commandments in time to

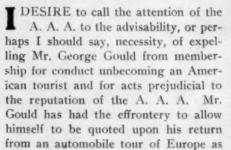
prevent me from taking life, so the driver was saved and is still there with the machine, as we telephoned to the Pope-Robinson people to send on a new spring. I have since been informed that my driver, Excelsior like, passed through villages at better than forty



miles an hour, and it was while he was doing this that he struck a sand bar and broke the spring. Of course, I cannot discharge him until I get some one to take his place, and I hesitate about doing so for fear I may get a worse, not a better man. I am sick and tired of dishonest, incompetent chauffeurs." The lady again added her mite with: "And he takes girls out riding when we are not around," which to her way of thinking was certainly a most serious offense, judging from the severe look upon her face.

Continuing his tale of woe my vis a vis told me that his former chauffeur, while his employer was out of town made a good thing out of renting the automobile out, often pocketing as high as forty dollars for a single day's rental. The gentleman told me he actually caught the chauffeur one day setting up a lunch at a swell Boston suburban hotel, which could not have cost him less than ten dollars for four, but as his guests had paid him five dollars a piece for the ride he was fifty per cent. winner on the transaction at that.





follows: "I traveled 4,000 miles in England, France, Austria and Hungary, and was my own chauffeur, except for 100 miles. During my entire tour I met with no accidents, and did not even run over a chicken on the road." The first part and the middle of Mr. Gould's interview is all right, but the final portion of it is enough to send a sickening shudder of disgust through the manly frames of every famous A. A. A. "tourist." Think of it if you can, A man tours 4,000 miles without a rumpus of any kind, simply like an ordinary traveler! He has no run-ins with irate citizens, scares no one, angera none, and then, worst of all, does not kill a single chicken! Can the great A. A. A. "tourists" sit idly by and allow this American to bring disgrace upon them? Can men with records of ten or a dozen chickens run over and slaughtered in a day's quiet "touring" be forced to consort or be classed with a man who in 4,000 miles of touring never once committed murder most fowl! Well, I guess not, and Mr. Gould will shortly feel what it is to bring disgrace upon the gentle, law-abiding American "tourist" by his unusual methods of enjoy-There are some things the A. A. A. has failed to do, but among them can not and I am sure will not be numbered any lowering of the high repute they have by consistent and persistent efforts caused the press and the general public to accord automobile "touring" as conducted by the officials and members of the A. A. A.

PERHAPS I am prejudiced against them for the money I have had to pay them during the many years I have been on the road, but as a class I must say that my opinion of the hotel clerks is not of the highest. Of course, there are some very diplomatic gentlemen who are content all their lives to stand behind a counter and fiercely bang a bell, while shouting "Front!" on every possible occasion, but even so, diplomacy as a man's sole possession will not en-

able him to earn a living at anything else in the world but clerking in a hotel. All of which may be considered in favor of the hotel clerk or against him just as you may be inclined to make your personal deductions in the matter. Granted, however, that diplomacy is the all-essential of a hotel clerk, what earthly chance has one of these bell-banging, "front"-shouting gentlemen got when he steps from behind the desk and attempts to enter legitimate business minus even his diplomacy? About the same chance I take it that a rocking horse would have to win the Suburban.

All this moralizing comes just at this time from the passing of one of the queerest allegements of a business man that ever made the automobile trade pay for his incompetency and I know you'll agree with me that the trade has paid well and often for some very queer things in this line. From a bell-banging clerk to the manager of one of the most famous of foreign tire makers' American branch was the jump this diplomacy lacking bell-banger made. The jump was most disastrous to all concerned. The poor foreigner he paid dearly indeed for his belief that a hotel clerk who wasn't really a good hotel clerk could make any sort of a business man; the clerk, well, he got more out of it than anyone else. Trips to Europe and chances to make enemies at every turn came his way fast and to his credit be it said he never missed either. But even the politeness of a Frenchman has some limit, and when the ex-bell-banger drew some \$300 or more for his expenses, while acting as "an official observer" on the famous sage-brush-nonstop-to-St. Louis-and-the-woods automobile run, it dawned upon the Frenchman that a man is known by the company that he keeps, and not wanting any man at the price, who kept such company as "the observer" was making them pay for, the Frenchman bade the bell-banger that was to vanish into the obscurity from which he had temporarily emerged. Thus ends the career, in the automobile trade of the finest example of a human four flush that was ever foisted upon it. We may not look upon his like again—at least, I hope we may not.



HE instant the tradesman or mechanic learns that you are an automobilist or a boat owner, he at once decides you are an equal combination of millionaire and darned fool. Having decided this to be your status the seller of goods or labor at once proceeds to mark up the price of what he has to sell and to mark down the quality and the quantity thereof, his idea being that a man with money enough to own either an automobile or a boat, and foolish enough to do so hasn't sense enough to know when he is being robbed or to I have noticed this ever since I took to motor cycling, and I believe I told you once or twice about my experience with the gentle repairer that modern, incompetent successor to the late Mr. Richard Turpin, of highway fame. Now comes a friend of mine who tells me that what we motor owners on land get is as nothing at all when compared with what is meted out to our brethren on the water. Motor boat owners meet the real thing in pirates, of which we landsmen have only a fairly expensive imitation, he says.

Not long since wanting the engines in a launch overhauled, my informant sent for a workman, who had formerly done such little odd jobs for him. In place of the man turning up in person he

wrote a letter saving he was now an "expert" in the employment of an automobile concern and could not therefore come down to see about the work. but as he knew the engines he would go up and overhaul them if notice was sent him when and where the boat could be reached. Not having been born vesterday, and knowing that the man in question had as much license to pose as an "expert" as a hod carrier would have to declare himself an architect, he wrote the man, saying he did not want an "expert," only an ordinary every-day mechanic, and if the man cared to come as such and receive the pay he had always got for similar work before he became an "expert," all well and good.

Seeing that the "expert" bluff was absolutely of no avail the man reported on board pretended to overhaul the engines and went his way. But the "expert" automobile bee had got into the poor fellow's head, and as he couldn't keep two ideas there at the same time, it had deprived him from what little knowledge he formerly possessed of tinkering with engines; an ordinary workman had been sacrificed to make an ordinary automobile "expert." The result was his overhauling amounted to naught; before the engines could be used a real workman-not an "expert"-had to be called in and the overhauling properly done. Later on the automobile concern, whose "expert" this inferior workman poses as, sent the owner of the boat a bill for twenty hours of expert labor by this utterly incompetent man at the modest price of sixty cents an hour and expenses. Of course, the bill wasn't paid, but it just goes to show you the robbery that certain people in the automobile trade practice upon those unfortunate enough to fall into their hands.

I might say here, however, that it

was but natural that the employer of this workman should stand sponsor for the workman's being an expert, because he himself is a man who a judge from the bench has felt called upon to declare was a man not only without 'scientific education, but without even the ordinary knowledge of a skilful mechanic, and one whose reputation for veracity was bad. Of course, no stream can rise above its source and no "expert" employed by such a man could be any other than of this deluded workingman variety, but nevertherless the whole affair is a reflection upon the entire automobile trade and a positive injury thereto.



HE other day at Dixville Notch up in the White Mountains I saw a pair of tires or rather two tires on the front wheels of one of those famous automobiles that John Brisbane Magazine Walker tried to build at Tarrytown; looked something like those famous legs of Francis Wilson in "Erminie," owing partially to the numerous protuberances plainly visible on the tires. These tires certainly were veterans, their owner telling me they had been in constant use for four years. The wonder is that in that time they had not gone the way all tires go, and it is a credit to the famous Hartford Rubber Works, whose product they were, that they had survived four years over those awful mountain roads. All this reminds me to say a word for the perfected Dunlop detachable tire which is manufactured by the same Hartford company. The Dunlop is an old standby in tires, a sort of Mercedes-like halo surrounding it, while its continued use by kings and plebeians

alike proves its general all around value and utility. All you need to put it on or take it off is a simple punch-like piece of steel and the pair of paws nature has supplied you with. The new rim of the Dunlop is a great stride on the road to perfection of detachable tires, and it goes without saying that any tire that is not detachable is not good for much, save on very heavy cars.



ALKING down Park Place the other day, I met that international impresario of applied amateur athletics, Col. James E. Sullivan, who had but just returned from the World's Fair, where he had charge of the athletic end of that exposition. It is of course unnecessary to add that the athletic end of the affair was properly carried out if Colonel "Jim" had anything to do with it. Mr. Sullivan is president of the American Sports Publishing Company, of New York, a concern which issues voluminous books, rules governing athletic sports of all kinds. Since the passing of the late lamented William B. Curtis, Sullivan is looked upon as the Nestor of amateur athletics and the final authority concerning everything connected therewith. Colonel Sullivan has won world-wide admiration and appreciation for his keen scent in distinguishing the amateur from the professional in sport. In other words, he is a record breaker in detecting the unclean amateur who would retain his amateur status while making a little money on the side. By that class of "amateur" athletes the Colonel is looked upon as the Old Nick himself, since he gets them every time if they indulge in wrongdoing.

With his arms akimbo, the Colonel told me how the automobile had figured in a shady transaction during the running off of the great Marathon race at the World's Fair. It appears that one of the participants had made a sly arrangement with an automobilist, who had overtaken him on the road during the race to carry the would-be winner eight miles toward the finishing line in his automobile. Of course, it is not necessary for me to observe that the poor fellows who were depending on their two feet had no chance with the four wheeler with Mercury perched on top.

A sleuth reporter, who was riding horseback and telephoning his paper as he rode, luckily, however, for the footpower racers, spied the horse-powered Mr. Mercury, and turning his trusty hay motor with his head towards the stadium, where Colonel Sullivan awaited the coming of the Marathoners, he did a Sheridan ride, and caught up with the automobile just as Mr. Pedestrian was dismounting in order to finish his record-breaking run. Then the reporter. riding through the stadium gate, dashed up to Mr. Sullivan and shouted out: "Mr. Sullivan, look out for No. 13, he is coming along in an automobile, and that is not fair, sir, that is not fair." Poising his cigar at an angle of 45 degrees, the unruffled James slowly said: "No, that is not exactly fair, or according to the rules, I will attend to his case." Walking over to Charles Harvey, who was ready to check the arrivals, Mr. Sullivan said: "Charley, tell No. 13 when he arrives that if he tries to break the winning tape I will break his neck." Then the Colonel stood by the tape with a fist the size of a Kansas City ham doubled up and ready for business. No. 13 duly came along, in the lead, of course, and Harvey did not give him the glad hand, but warned him, pointing to the Sullivan's (John L.) pose at the tape. After sizing up matters Number 13 stopped when he was within ten yards of the finish, carefully eyed the Sullivan fist, and then began to argue at that safe distance. What James E. said to him, I do not believe would be printable, but, it was said in the usual square-jawed style characteristic of the Colonel. Following the remarks came a prompt disqualification for life of unlucky 13, with the advice that he run away and play with automobiles. "Come in and see me," said the Colonel, as he went in to his palatial office on Park Place, then just before he got out of my hearing he gave me this parting shot, "And that is what automobiles did for us besides throwing a lot of dust down the throats of the other fellows."





BEWARE of how you buy your automobile equipments and sundries of department stores, because if you are not careful you may be sorry. Just a true little story of what happened to a man who had a lot of faith and very little knowledge, and who therefore fell an easy prey to the bargain counter gentlemen. Going into one of the establishments near Herald square. which claim to sell you everything better and cheaper than anyone else, not even excepting the makers of the goods themselves, the trustful man bought himself a complete outfit of everything from lamps to leggins and goggles to gossamers. Just as he was about to leave the establishment, convinced that he had all that was necessary to make the public believe he was the real thing in motor driving, he espied a small instrument of whose use he was ignorant. Asking the clerk, who had temporarily been taken from the hosiery counter, placed in charge of the auto department, for information, caused the ex-stocking seller to seek the "manager" of the auto department, who at once proceeded to enlighten the good thing upon the merits of the invention, and how necessary such an equipment was upon every first-class automobile. "You see," he said, "with this instrument attached to your automobile you can tell exactly how fast you are going at all times, and thus you have absolute proof of your not transgressing the law should you be falsely accused of doing so by some blackmailing constable or policeman."

The good thing thought he recognized in the instrument another good thing, so he bought it. In all the glory of his new department store outfit, including, of course, the famous speed register, he sallied forth to treat the public to a view of what a real, real automobilist was. So gallus he looked and so gay he felt that before he knew it he was hitting the pike with all the speed that old car was capable of. But he wasn't a hardened scorcher yet, so he kept one eye fixed on that speed register just to be sure he was safe. On he went, but the needle never varied a hair's breadth from the mark on the registering dial, which said "eight miles per hour." Presently he heard a shrill whistle, but knowing no one could be whistling at him, he never turned his head. Again and again the whistle; then he looked and saw that the whistler was a cycle policeman, who for some reason or another appeared to be extremely anxious to interview him; but as he was not acquainted with the officer and the needle of the speed recorder was still glued to "eight miles per hour" he went merrily on his way. Presently a red, perspiration streaked face topped by a policeman's cap, peered at him in no very pleasant manner. "Hey!" said the owner of the face, "whatcher doing with this chew-chew cart? Do you think ver Willie Vanderbilt breaking a record? You're pinched, see?" Vainly the good thing protested. He called the speed register to witness that he had never gone faster than the lawful rate of speed, but to no avail. It was the station house for his; bail and next morning \$25 fine, and a lecture by a crabbed old man whose physical ailments made he and justice not even on speaking terms. Confident in the reliability of the speed register, the good thing announced he'd fight the outrage of being arrested and fined to the bitter

To make sure that he was safe he called upon the maker of the instrument and asked him if he would appear on the trial to explain and to defend the accuracy of the register. This the maker said he was only too glad to do, but to make assurance doubly sure he asked the good thing to bring the instrument in so it could be examined and tested beforehand. Next day the bargain counter customer brought the register to the maker, so he could test it. No sooner had the maker looked at the instrument than he asked: "Where did you get this?" Told by the good thing that he had bought it near the Greeley statue the maker said: "Well, if you had gone a million miles a minute this never would have shown it. You see, the dry goods store people came to me and asked me to lend them one of my speed recorders to make a showing with in their windows. As they only wanted it for exhibition purposes I sent them up merely the case, without any of the works inside of it, and it is this empty case they have sold you, not knowing what it was." There was a great deal of inflammatory language used close to the feet of bronze Mr. Greeley within a short time after the owner of that speed register left the office of the man who made it, but that didn't help matters any. The moral is plain, when you want anything for an automobile go to a concern whose business it is to deal in such things, and don't go to a place which pretends to sell everything for anything.





SUALLY prosperity spoils a man. Adversity often refines brings out of a man all that is best and noblest in him, but sudden wealth rarely does anything but the contrary. I had a splendid example of this brought to my notice recently. A Frenchman who came to this country in pre-automobile days and who by a profound contempt of breaking his neck, achieved a certain amount of fame as a reckless rider of motor cycles was the man; the performance was this: In his motor-cycling days the Frenchman had nothing to risk but his neck, and the money he got for doing that was little indeed, so when it came to entertaining he either had to cut that out altogether or else ask the indulgence of some less financially light-weighted than himself. Frenchman in question chose the latter plan, he asked and received the hospitality of an American cyclist, who had met him abroad. The cyclist had settled down as the proprietor of a little seaside hotel and to this establishment came the Frenchman. Later his friends came, too, and the best in the house was theirs on the Frenchman's orders. Wines, dinners, cigars, etc., all were

served, all were charged to the Frenchman, and they remain charged until this day, though their original appearance on the hotel keeper's books was some four years or more ago. Since then the Frenchman has won a big international road race or two, has achieved fame and fortune as those things go abroad, but he hasn't apparently acquired honesty, since those bills he contracted for food and drink in the days of his adversity, have never been paid; in fact, I believe they are completely beneath his notice since they haven't even been referred to by him. As I said in the beginning, a little money when it comes suddenly to most men does not improve them or their reputations, and this Frenchman's facile forgetfulness of what most men would consider a debt of honor is a very fair example of the truth of my statement.

THEN gentlemen engaged in the pleasant occupation of raking in the public's money disagree upon the size of their respective rakes the disagreement is almost sure to result in some interesting disclosures. While it must be admitted that the employment of the automobile as a public service vehicle has so far, in America at least, proved a very expensive and not over remunerative experiment which many have sadly regretted having indulged in, yet the "seeing this tour or that" game wherein the automobile plays a moving part will go far toward removing the reputation of being a bank-breaker. which the automobile for hire has heretofore been credited with being. In an earnest endeavor to monopolize the extremely good thing of showing visitors the sights of New York at \$1.50 per sight from an automobile, it has become known that the daily receipts of one of these companies has averaged about \$1,000 per day for more than a year back. You don't have to be any lightening calculator to get a fair idea of what the profits have been with these figures staring you in the face. No wonder the "seeing" companies are inclined to fight over such a gold mine as that, who wouldn't fight for a game like that I'd like to know?

SO Pembroke Coleman has decided to retire from athletics through failing health. Possibly some of my readers do not know who Pembroke Coleman is or what he has been; for their benefit I would say he is the most expert timer of athletics in the world today. His watches have timed most of the national and international athletic contests abroad. I knew "Pem" Coleman thirty years ago and he then timed me in a bicycle race at Newport, Monmouthshire; and, later, he timed my American bicycle team on the principal tracks of Great Britain. Always steady, genial and efficient and his accuracy is known on every course in Great Britain. What a flood of reminiscences the mention of Pembroke Coleman's name brings up! It brings to my mind other great men of English athletics, such as Henry Sturmey, George W. Atkinson, George Lacy Hillyer, others of a like ilk, who have not been heard from recently. It also calls up the old crowd of the Fleet street boys who are always present at the great athletic meets in the old country. Pembroke Coleman deserves well of English athletes and sportsmen just as W. G. Grace does and I hope some steps will be taken to get up a handsome testimonial for Pembroke. He should be given an annuity for the rest of his life by the lovers of athletics. My pound is ready for such a fund whenever it may be started.





RAN across a Frenchman at Long Branch during the carnival, and, though I had not the time to devote to him that I should have liked, yet even under adverse conditions I learned a lot about automobiling which I had never even thought of before. gentleman in question, Mons, Clermonte, among other interesting observations, said: "There appears to be a widespread and firmly rooted idea in the minds of the non-motoring public, that the speed of a vehicle is a fairly accurate measure of its dangerousness. Of course this is really so when increased speed means loss of controllability. A motor car traveling at eight or ten miles an hour is just as effective an agent for injury and harm to roadusers as one traveling at twice these speeds. Increased speed may mean increased danger for those riding in the car when anything goes wrong with the parts.

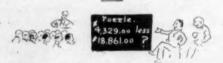
"Considering, however, the automobile merely as a battering-ram let loose upon the streets, the danger lies almost entirely in lack of controllability. Loss of control accounts for the greater number of accidents, and, if it could be ascertained by each individual motorist at what speed his power of control was at its best, or maximum, I think the accidents would be few and far between. I do not think sufficient attention is paid to the personal, or, I may say, the physiological, element in the would-be motorist. The average man or woman, with a healthy nervous system and normal vision and hearing, may quite easily undertake to manage a car within the legal limit, but beyond that, and in speeds up to fifty miles an hour.

"I do not think there is any human being capable of averting a catastrophe under certain conditions. I should suggest that every motor car driver be subjected to a very thorough examination of his capabilities as a motorist before being allowed to drive a car on public streets, especially in New York. The examination should be so devised as to be a perfect test of his or her vision, hearing, and general physical condition. Motor driving, you know, involves quite a considerable strain upon the nervous system."



ON'T abuse the city. The city persists, and we have got to reckon with that fact. We are not going to solve the problem presented in this urban concentration of people by sending people back to the country. We have got to work out our social salvation through the city; but the city through which our social salvation will be worked out will be a very different thing from either the city or the country as we have known them in the past. Formerly there was a sharp line between country and city-green fields on one side: masses of houses on the otherhere farmers; there mechanics and business men-here hay wagons; there horse cars-here the work of God; there the work of man. Now that line is disappearing. You have to go far away to get to the real country, and the real countryman is becoming extinct. Even the farmers watch the stock market and ride in automobiles. The old city was like a lump of butter in the middle of a slice of bread. Now trolley cars and automobiles are spreading the lump out thin. Greatest New York covers a thousand square miles of land. In the near future the majority of Americans will be neither city nor country people in the old sense, but suburbanites. They will live neither in farm-houses nor in tenements, but in comfortable homes, with neighbors on each side, the trolley on the next block, and an ever ready automobile in their back yard.

In a thing like automobiling, where intelligence is the rule, it seems strange that so many advertisers should persist in offering things "cheap" when "low-It is worse still priced" is meant. when they offer to sell "cheaper" than their competitors. The automobile buying public has long since reached the conclusion that what is "cheap" is dear at any price. This is an age when the universal sentiment is favorable to paying a fair price for labor and also for the product of labor. Men now look to quality, and believe when they buy they pay the full price for what they get.



YOU can't always tell what a man is by the name he bears. I never had this proven to me more convincingly than in the case of a man named Pickard, who has petitioned the United States District Court in Chicago for his discharge in bankruptcy, telling the court that he owes \$18,861 and has only \$4,329 to pay it with. Now, I can't imagine how a man with this name ever failed to get the money, especially when he admits in his petition that he mortgaged a French automobile "valued at \$3,500 for \$7,550." Any man who can pull off a deal like that ought never

have any occasion to seek relief in the bankruptcy court, even if his name is Picard. Why he don't become an "importer" and pull off a few non-stop "records" out in the sage-brush with a couple of his employees to watch him is a mystery.



WHEN I am on the road I run up against three or four men every week who tell me that they are advertised through the quality of their goods. That that was the best kind of advertising they could do, and the only kind that was worth anything. Part of this idea is all right. The best advertising that a man can possibly do is to turn out good work. All the rest of the advertising in the world isn't of much use if this first principle of advertising isn't adhered to.

Swindles sometimes succeed, but it isn't generally so. Permanent success is sure to be built on merit. The man who makes inferior goods has to keep on finding new customers for them. You can't build a business that way. If the goods are not right they ought not to be advertised. Advertising won't work miracles. It won't make a dark office light, nor half-scrap tires all rubber ones. It won't make delivery prompt, and it won't make clerks courteous. All these things have to come first. Advertising is simply and solely telling people where the right goods and the right treatment can be found. Poor goods will not stand good advertising, because good advertising is truth telling.

Advertising is a means of communication. It is history, or news, or both. It doesn't change the goods, or the

manufacturer it advertises, in the slightest degree. The best that advertising can do is to represent the goods or the maker in a perfectly just and vivid way. As good a definition of advertising as I ever saw is: "Good salesmanship is agreeable, adequate representation of goods in the presence of both goods and customer. Good advertising is the same thing in the absence of goods and customer."





MAN came along up in the White Mountains recently and asked me how to tell a good lubricating oil from a poor one. The only advice I could give him was never to buy oil from any concern except one which is above all possible suspicion. But he wanted to know how he was to distinguish the oils when he was where he could not patronize a first-class dealer. Now, I didn't know a bit more about this than he did, but a man in my position can make no such admission, so I went at once and consulted a good friend of mine and he told me this rule of thumb test, which later on I in turn imparted to my information seeker. A fairly reliable way to test two samples of lubricating oil is to put a little of each oil between the finger and thumb, one sample in the right hand and one in the left. Then rub the fingers and thumbs together with the oil between and continue rubbing until one of the oils is felt to become the thinner, as it were, and to lose its volume and greasiness. This is the one not to select, but use the oil that remains thick and greasy and retains its viscosity. This is a rough and ready way, but it is a good one and needs no tools but the fingers to try it.



I'D like to get a chance at a really intelligent motorphob, if such a thing as an intelligent hater of automobiles is possible. If he was at all amenable to reason, to common sense or the demands of the first rules of fair play, I'd call his attention to these few facts: The Queen of Sheba brought her presents to King Solomon loaded upon the backs of asses and camels. She herself rode in a sort of basket fastened to some swift dromedary's hump. If you have seen a dromedary move you will realize that the Queen was lame and sore when she finally climbed down inside of Solomon's cedar gates. Under such conditions of transportation the majority of people were necessarily poor and necessarily The products of different ignorant. parts of the world could not be brought to them. They could not possibly know that the earth was round, they had no means of traveling around it. As we have progressed steadily up, through the springless two-wheeled cart, the Sedan chair, the galley with its banks of oarsmen, the swifter sailboat, the stagecoach, the steamboat, and the railroad, our condition is steadily improved with out added facilities for moving The present great effort of about. man to free himself from the slavery of the law of gravitation is represented by the automobile. The automobile will not only make you independent of gravity, which seeks to tie you to one spot. It will also make vou independent of the railroad trust, of the streetcar trust, of the price of oats and of our present limitations of locality generally. You should encourage every man who invests his money to help on

the development of the automobile. Do not class yourself among the primitive dull minds that instinctively hate and oppose whatever is new.

Then, as I said in the beginning, if he had anything in his head but mush, I think I would have him looking at automobiles a little less hatefully than he formerly regarded them.





WAS making a little tour of the White Mountains country this spring, and in the course of it one day I drew off to one side of the road with my machine and stopped to let an approaching farm team pass. The team came up, showing no fear at the sight of the big Toledo, so I hailed the farmer in the wagon. He stopped his team.

"I am glad to see that the horses through here have become used to the automobiles and are no longer frightened by them," I said.

"Yes," replied the farmer, "but it's a big setback to us farmers. It's goin' to raise our taxes like all possessed."

"Raise your taxes!" said I.

"Yes," he replied. "You see, some of our feller citizens has been hot foot fer a good while back to have our town git one o' these steam road makin' machines, and they cost tremendous—two or three thousand dollars—and we've been objectin' to it every time, and carryin' our p'int, on the ground that one o' them machines workin' on the roads and tinkerin' of 'em up all the time would be everlastingly skeerin' our hosses so at every turn that there'd be nothin' but smashed wagons and broken bones in the town from one year's end

to t'other, and it wouldn't be safe fer us to drive nowheres."

"Well?" said I, not a little puzzled.

"Well," continued the farmer, "then by and by along comes the automobiles of all kinds and sizes and shapes, and with all sorts o' noises, and the first thing us farmers knows it gits so our hosses ain't no more afeard of 'em and don't keer no more about 'em than if they was only ox teams gee-hawin' by. And that knocks us."

"How so?" said I, still puzzled.

"How so?" responded the farmer. "Why, consarn it, if our hosses ain't skeered by automobiles, of course they ain't goin' to mind a steam road makin' machine, and so we hain't got no legs to stand on in arguin' ag'in the gittin' ot one! And they're goin' to git one and set it to work, and our taxes is goin' to be humped up like all possessed to pay fer it! Two or three thousand dollars, and all because our hosses has got used to automobiles on the roads, and won't skeer no more! Big setback? I should say so! Geet up, Bill!"

And the farmer drove on, but he didn't appear to be as much cast down over the setback as one might have thought.

CO C. L. Charley, of Mercedes fame, s is to promote a motor boat run across the Atlantic, eh? Well, well, Mons. Charley always was famous for his anxiety to give away his money without expecting anything in return for it save the pleasure of giving, but this last example of his generosity certainly does certainly out-Charley Charley. As the story goes, Mr. Charley "offers" \$10,000 to the first auto boat that makes a successful trip across the Atlantic, and he might with equal safety offer \$100,000, since the larger sum would be quite as safe from capture. Some one called Mr. Charley's attention to the difficulty of an auto boat's procuring fuel in the mid-Atlantic, but he easily disposed of that by stating that vessels could be stationed at several points on the way over to supply the necessary gasolene to the auto maniaes. Who was to pay for these vessels was not mentioned, but I presume that Mr. O'Neptune or David Iones will be expected to foot the bill. Those two past grand free advertising grabbers, Messrs. Edge and Fournier, have already won the money, according to further cable dispatches. Providence, in its wellknown leniency to fools and drunkards, may permit such boats to cross in the wake of a consort which may be able to dodge the weather, but to start anything like a boat across the Atlantic without sufficient fuel and with the hope of finding tenders in a storm would be nothing short of a direct attack upon damphool industry, and certainly the instincts of self-preservation and the protection of the only class to whom the vanity of the free advertising grafter can hope for any reward should make him the last one on earth to propose anything so dangerous to his means of subsistance.

The man who maketh two automobile papers to grow where only one grew before is of many days in the week and full of trouble. Hard luck swatteth him on the right side and on the left, till he findeth himself left on both sides. All of which reminds me that in the very near future there will be quite a diminution in the number of alleged automobile publications, one of the vanishing ones being quite a pretentious affair. The AUTOMOBILE MAGAZINE has seen the birth of every automobile publication in America, bar one; it has also seen the demise of almost a score of "long-felt-want fillers," some of which were exceeding expensive emptiers in

place of fillers for the pockets of those who backed them. If rumor is any way near correct, and in such matters it usually is, the passing of some of the present crop "want fillers" will be long felt by those who paid the bills.



AID a doctor to me recently, and he wasn't any French doctor, either: "I know the automobile is going to be the vehicle of the future, and I believe that the future when it will reign supreme is very much nearer than many suppose, but with all this as the average automobile is just now, it seems to me a thing of noise, and as such I cannot either advise its use or welcome its coming, since noise is an undoubted factor in impairing the tone of the nerve centers. Whether we are conscious of it or not, it hurts the brain and has a deafening, dazing, bewildering effect on the mental processes. It tires the brain and tends to produce cerebral hyperemia. To live in a noisy atmosphere is to shorten one's days. Irritability, neurasthenia, insomnia are The tympanum or common effects. drum membrane of the ear is injured, the circulation of the cerebro-spinal fluid is disturbed, and the nerve cells themselves suffer as though subjected to mechanical violence. Of course you, as a layman, will think this is only another one of what you are so prone to call 'doctors' scares,' but whether you realize it or not matters are as I have stated them." Knowing the man as I did, I'm blessed if what he said didn't impress me as being worthy of placing it before you; so here it is. What do you think of the argument?





H, those French doctors! They're at it again, and now they announce an increasing number of cases of acute nervousness which are due directly to automobiling, and they predict that with an increase of the sport will come an increase in the number of The sickness is described the cases. by its French discoverers as the neurosis of anxiety, and may be traced to the excitement and mental tension of rapid traveling with the emotional repression necessary to secure a reasonable feeling of enjoyment, while speeding rapidly, with risks and dangers constantly at hand. If this keeps on I will expect the salutation among those automobilists who affect foreign machines to be "How's your neurosis?" and the reply to be "Pretty good; but how's your emotional repression?"





A N advertising agent who asserts that he is the agent of the publisher, who pays him, and that he works for the advertiser to whom his services are free, has sent me a booklet containing quite a list of publications, of which he says:

"We have listed no publication unless assured by the publisher that the commission paid us costs the advertiser nothing in price nor any other consideration which an advertiser might think he could secure by dealing direct."

There are perhaps six hundred publications listed, and I would be very much pleased to pay a reward of a

hundred dollars to the man who can prove that as many as twenty-five of these publications do not give to some advertisers the advertising agent's commission. I do not believe that there are ten papers on the list that do not, in some instances, give the agents commission direct to the advertiser.

Whether or not the advertiser gets the agent's commission is likely to depend entirely on his ability as a buyer, and his willingness to stick it out.

This is just one more evidence against the nonsensical idea that the publisher pays the commission. does absolutely nothing of the sort. The advertiser pays the commission. The advertiser's money is the only money involved in the transaction, and the agent's profit comes from this money. The only safe and reasonable way-the only perfectly honest way for the advertising agent to deal with an advertiser is to give him the net prices, that he is able to obtain from publishers and to charge him for his services. It is absurd to talk about giving his services free. The services of an intelligent advertising agent are worth a reasonable price to any advertiserthe agent has had experience and has acquired knowledge that the advertiser has not. The agent looks after the details of the work, and is as much entitled to pay for this from the advertiser as is any other employee. If an advertising agent is any good at all he renders real helpful, valuable service, and should be paid for it by the man to whom he renders it. As soon as an agent who is working for one man takes pay from another, he lays himself wide open to the charge of bribery.

If a silk buyer were to go to John Wanamaker and tell him that his services were free to Mr. Wanamaker, and that the silk mills paid him commis-

sions, do you think that man would get a job? In any mercantile business such a proposition would be looked upon as the height of idiocy, and yet that is the basis on which a great many advertising agents offer to work for advertisers. Chancellor Kent, in his commentaries, says: "A person cannot be both buyer and seller at the same time, or connect his own interest, in his dealings as an agent or trustee for another. It is incompatible with the fiduciary relation."

An advertising agent who gets his pay from the publisher certainly does have to mix his own interest with the interest of his client-the advertiser. As the agent of the publisher it is his business to get the highest rate possible for the publisher's space, while his own personal interest would be to get the largest possible commission. It is the advertiser's interest to buy the space as cheaply as possible, and, as in his case the commission is a part of the cost of the space, it is to the advertiser's interest that the commission be as little as possible. Thus, in this case, the interest of the advertising agent and the interest of the advertiser are almost diametrically opposed.

The agent who issued the booklet I have mentioned evidently recognizes the logic of the situation, for he attempts to justify his position by saying:

"The agent being in a measure responsible for the advertiser's success is forced to consider the advertiser's interest first, because an agency is accounted successful or otherwise in proportion to the success that attends its customers."

Which is all very well so far as it goes. But the agent who is getting thirty per cent. from one publication and ten per cent. from another, is pretty likely to find some justification for his

action in selling his customer the space on which he makes thirty per cent., rather than that on which he makes only ten. The best way to resist temptation is to avoid it. When a man's selfinterest pulls one way, and his judgment another, something has got to give. The judgment is likely to warp a little

It is a notorious fact that there has been so much trickery and dishonesty in the advertising business that a man engaged in it sometimes feels embarrassed when he is asked what business he is in. He knows before he replies that it is probable his answer will lower him in the estimation of the person with whom he is talking This is true because much of the business of advertising, and particularly the business of the advertising agent, has in the past been carried on on unbusinesslike principles.

Common, logical, honest rules that apply to other businesses have not been applied to advertising, and if advertising ever takes its proper place in the affairs of the world, it will have to be governed by the equitable rules of general business. One of the first of these rules is that an employee must be paid by his employer and not by one whose interests are in opposition.

A satisfactory agent for the advertiser must be one who is the advertiser's agent, who works for him to secure the lowest price the publisher is willing to give under any circumstances, and who is paid by the advertiser either a fixed commission on the next expenditure or a fixed salary per month or per annum. In that event it makes no difference in the advertising agent's profit whether his customer uses space in one newspaper or another, or in magazines, or for billboards, or street cars, or dodgers,

or red balloons. The agent has nothing to influence his judgment but the value of the advertising to his client.

THE National Association of Automobile Manufacturers informs THE AUTOMOBILE MAGAZINE that exhibitors of automobiles at shows sanctioned by the National Association will be debarred henceforth from exhibiting in any show which may be sanctioned by the Manufacturers' Association. This particular drastic action on the part of the Association was called forth by the proposed exhibit of foreign automobiles under the auspices of the Importers' Association in New York during the time the N. A. A. M. show is on at the Madison Square Garden in January next. The importer has claimed that little or no attention in the past has been paid to him in the awarding of space at the national shows and that favorite members of the National Association have been allowed almost as much space as they felt inclined to ask for. In a measure, this is true, and this trouble has arisen generally as a result thereof. For instance, extensive space on the main floor of the Madison Square Garden was occupied at the last two shows by a manufacturer of large busses and trucks which could just as well have been better exhibited somewhere else, because the general public was not and never will be particularly interested in that form of motor vehicle. If the entire space in the Garden had been more evenly divided up and each exhibitor been allowed to exhibit, say three or four cars and no more, there would have been no necessity for displaying goods in the cellar and on the roof of Madison Square Garden.

All this aside, however, there can be no question, as to the correctness of the attitude now taken by the Manufacturers' Association, because it is well understood who the two or three interested parties are who have stirred up the present opposition show, the chief of them having had himself appointed as "manager." The opposition "manager" is a foreigner with a perpetual thirst for office acting as reporter for a New York daily. His statements in the paper he works on that it was the wish of members of the Manufacturers' Association that an opposition show be given in order to relieve the pressure on the Madison Square Garden one is infantile sophistry and fit literature for the babe who has not yet cut his teeth. I believe that the public should be protected against two shows in a city and should not be expected to pay two admissions to see something they may wish to buy. Furthermore, with two shows there is the loss of comparison which could better be made if the foreign and domestic vehicles were shown side by side. There is no doubt but what the foreign exhibit will attract attention; even the non-American manager can not prevent that, but the fact that the saloners will not be permitted to exhibit at any other show in this country unless they organize the shows themselves will detract from any advantage they may think they may hope to gain from having a show of their own in New York.

Ask questions always and you'll learn a lot, even if much of it is of no real value, but never forget that while

All free advice may seem quite nice, But if you'll think it o'er,

You'll find it's worth about the price You paid for it; no more.

Any business which enjoys the confidence of the public receives quicker and greater returns from money expended for advertising purposes than do businesses called unreliable by the public.



HEY are telling a good story up in the White Mountains about Mr. Enrique Conill, president of the Havana Automobile Club, who has had his 60 H. P. Mercedes, a most elaborate and costly machine from an equipment standpoint at least, up there with him all summer. The mountain people say that one day he announced his intention of going over the course of one of our Two Days' Tours of last July. On his return in the early evening someone remarked to him that it was impossible that he had gone completely around and was back so soon. "Oh, yes, I did it," he replied, "and climbed the mountain, too," at which there was much surprise expressed. Next day there came from Gorham a story that a man who could not speak a word of English had rushed the toll-gate and was up at the top of the mountain and back before the owners of the toll road could get a policeman. I have not seen Mr. Conill to verify this yarn, but I do know that he can speak English very well, and he must have given the gate keeper a most convincing jolly when he pretended that he could speak only Spanish. It may be that a banknote of generous proportions played some part in the transaction, as the toll keeper declares that no one went up the mountain and that no one will be allowed to do so until the "Climb to the Clouds" next year.

TO me it has often been a wonder, with the perfection to which amateur photography has been brought by concerns like the Kodak people, that publications like the AUTOMOBILE

MAGAZINE were not flooded with interesting photographic impressions of automobile accidents and incidents. Just the contrary are the actual conditions existing. It is one of the most difficult things the editor has to deal with, he tells me, this procuring of interesting photographs for reproduction for our readers. In an earnest endeavor to overcome this press-the-button shyness on the part of automobilists, my old friends, Thomas B. Jeffrey & Co., have just closed a competition wherein they offer prizes aggregating \$200 for photographs wherein the automobile plays a part. Perhaps this energetic Kenosha concern may shake up the photographers, but if they do they will certainly deserve the thanks of us all, and will encourage others to try something along the same line, with the much-tobe-desired result that the artistic side of automobile environment will receive an impetus which I know it needs.



HE Olds Motor Works, Detroit, are gathering together a pretty strong lot of officials. The two last to join the famous Detroit concern are my friends, Harry Unwin, late secretary of the National Automobile Manufacturers' Association, and Burton Parker, who made so many friends while he was in charge of the sales and advertising department of the Hartford Rubber Works. I feel assured that with such additions as these to their already able forces the Olds Motor Works will do even greater things in the future, as the men above named are of broad experience and can be depended on at all times for thoroughly good work.

Mr. Unwin went out of the automobile business for a time, taking a position in Virginia where he was boss of some quarry in a place where I believe he was the only white man in the county excepting the paymaster, who came through at altogether too infrequent intervals to please those he paid. Incidentally Mr. Unwin acquired a slight stoop from carrying a cartridge belt and Winchester.

Mr. Parker comes of the well-known Parker family, of Hartford, and while there are quite a few people in the West whom I always like to see, it seems to me now that I will have to break over my territorial line at Buffalo once in a while if it is for nothing else than for an opportunity to see such good fellows as Messrs. Unwin and Parker.



T bodes well for the sport and the future of the automobile when such men as Henry M. Flagler, Marshall Field, John D. Rockefeller and John B. Spreckels take up the sport so enthusiastically as they have done and are doing. It is the fashion now, but in time the fashion becomes the necessity. Utility and health follow in the wake of the automobile and, as President Winthrop E. Scarritt said to me the other day, "Not in four thousand years has anything appeared which annihilates time and space as does the automobile. First came the telescope bringing other worlds nearer to us: then Morse flashed the message over the wires, 'What wonders God hath wrought!' Morse made it possible for the human being to communicate with his friends around the world in a flash of flame. Then came the telephone to lengthen man's ears so that we can talk to those we love and those we don't love thousands of miles away. But in all these, nothing had been invented to project the body through space in any given direction where roads exist as the automobile is capable of doing. The man desires and the motor does the rest. It out-travels trains and is ready in the midnight for emergencies. It will save lives of countless thousands in days to come and is doing so now. The number of lives that are being taken through accidents or carelessness is like the atom compared with the mountain of good it will accomplish. A person is sick unto death some twenty miles from a doctor; it may be that if a physician can reach the bedside in one hour the life may be saved. What agency can do this but the automobile! Inside of the hour the doctor is at hand. It will relieve the too heavy burdens of the faithful horse. It will bring good roads and from a commercial standpoint it promises to revolutionize all present work done by the clumsy and noisy delivery wagon. These are only a few of the things that the automobile will do, and to assert that it is the most important invention that the world has ever seen is not saving too much for the motor."



NEW terror has arisen to confront the automobilist, especially if he own one of what the enlightened person is pleased to call a "real red devil machine." The new danger is in the shape of the red bull, one of which recently attacked two automobiles and, according to the newspaper accounts of the battle, the red bull got much the best of it. It does not matter how strong an automobile's radiator may be, the head of a bull armed with a strong pair of horns is capable of putting it and the machine out of business. One good thing, however, is that red bulls are not frequently met on the roads where much automobiling is indulged in. In the meantime, those frequenting bovine in fested thoroughfares will find it advantageous to have their machines painted some other color than the one that which seems to anger red bulls and those of divers other hues as well.

\* mill

F. EDGE, of London, is not happy, but I do not believe that Mr. Edge is often happy judging from what I have read in the papers from both sides of the Atlantic the past few months. Mr. Edge complains that his home club, the Automobile Club of Great Britain and Ireland, do not conduct their part of the international races as they should be conducted; that is, they are not conducted to the satisfaction of Mr. Edge, though I do not believe that they ever could be conducted to his entire satisfaction. Of course, on one side we see a body of sportsmen banded together for what they believe to be the best interests of automobiling, while on the other hand, there is S. F. Edge, Ltd., purveyors of automobiles, motor boats, navigable balloons, vans, motors, and what not. Mr. Edge has always been willing to represent England in races, and believes that as he foots the bills he should have a good deal to say about the arrangements, and right here is where the conflict of opinions comes in between Mr. Edge and his club. Mr. Edge is very fortunate or unfortunate in being able to write for the papers and he has also the unhappy faculty of speech-making, two accomplishments which have brought down criticism on both him and his club.

It will be a sorry day for automobile or any other kind of sport when the commercial spirit and the commercial end thereof is permitted to conduct affairs. As a safe bulwark against anything of this kind stand such clubs as the Automobile Club of France, the Automobile Club of Great Britain and Ireland, and the Automobile Club of America, These great organizations stand between the public and the commercial end of the game, and it will be best for the commercial end of the game if it refrains from forcing itself too much to the fore in the sporting side of motoring. Mr. Edge has undoubtedly performed fairly well as a driver, still he has done nothing to warrant him posing as a dictator, for there is right along side of him that other undoubtedly great driver and popular sportsman, Charles Jarrott. Mr. Jarrott occupies a different position from Mr. Edge, however, and if a voting contest could be had, I believe he would win out at the polls as being the most popular racing man in Great Britain.

Speaking of Mr. Edge, reminds me of the fact that he may yet be seen this side of the water, as the secretary of the Automobile Club of America has handed me a letter from Mr. Edge, in which he is desirous of learning some particulars about the motor boat and automobile races at Ormond Beach. I have written Mr. Edge, stating that no motor boat race will take place there, as such races can hardly be pulled off on the sands and there is not a great enough depth of water to give the races off the beach or on the Halifax river. There will be much interest if Mr. Edge comes over here and brings with him his Napier automobile and boat, because while Ormond is out of it for the reasons above noted, it looks now as if some

motor boat races may be given elsewhere in Florida, in Havana, and possibly in Charleston, but of this I am not positive at this writing.



F. HATHAWAY, the automobile horse educator and revivalist of automobiling, has two distinct zones of usefulness. In the winter he frequents the sands of the South, where there is scarcely a day that his little red steamer cannot be seen flying up and down the famous wave-washed Ormond Beach, In the summer he holds forth at Bretton Woods in the White Mountains, where this season he has done yeoman's service for the sport in making the horses of that section familiar with the automobile by an educational course which has been illustrated far and near and a picture of which the editor has produced elsewhere in this issue. From Mr. Hathaway comes the following: "The modern motor car has found its way into the White Mountains, and from all parts of New England, from New York and New Jersey, and even from the middle West, it is being headed towards that picturesque section of New England. Early in the season the horses were very much afraid of it, as previous to this season it was a comparative stranger. At Bretton Woods stables, where there are more than one hundred horses, the experiment was tried of bringing the horses in contact with cars of various types, until they became thoroughly acquainted with the fact that the machines would not injure them. The first move was to drive the cars into the stables, causing at first a great deal of commotion, some of the horses being so frightened that they lay down in the stalls;

but with daily schooling and coaxing, most of them were soon induced to eat oats and sugar from the machine, and some of the best pupils came to this within one hour's time. It took careful and painstaking work for a few days to get them accustomed to the cars under all circumstances. The results have fully compensated the teachers for their efforts, as there has not been the slightest accident to any person, horse or vehicle. This is the more remarkable in view of the great amount of driving and riding at Bretton Woods, the record for the eight days, August 21 to August 28, inclusive, showing just 496 horses let to guests at Bretton Woods. In this equine school were fifteen spirited saddle horses that are ridden by the hotel guests, many of whom were never in a saddle until they came to Bretton Woods."

TT seems to me that the three greatest evils automobiling in the past has had to combat has been first, the dishonest garage and repair man; second, the dishonest and lordly chauffeur; third, the manufacture of automobiles that never did go, never will go and never could be made to go. The doings of the garage man have been illuminated in story, in court and in the private annals of the much imposed upon automobile buyer. While seated in the Waldorf-Astoria one evening recently, with a friend of mine, two prosperous looking brokers, who were near us after greeting each other, one of them said: "Well. Joe. I see you have bought an automobile, what do you think of it?" "Well," returned the other, slowly, "I thought it was expensive keeping a wife, but that isn't a marker to supporting an automobile." That was a great story with a very few words and in the main it is a truthful story, too.

The chauffeurs are a sort of second

growth. He has been formerly employed in some less profitable occupation than driving an automobile. He is responsible for much of the hostility showered upon the sport by both press and public. Stealthily the chauffeurs slides out with his employer's machine at night or even in the daytime, and uses it for other purposes than that for which it was purchased by its owner. He swells out his chest and tries to look the part of his employer and always tries to see how near he can come to running into other vehicles and pedestrians without actually doing so. Thus he impresses upon the public his importance and his dare-devilism generally; he ought to be in jail, and he should be kept there until he learned just what the public thought of him. Not content with this the chauffeur has a tendency to stand in with the garage man in the purchase of unneeded material and sometimes he actually breaks parts of a vehicle in order to get some profit out of the repairing of it, for which his employer will have to pay.

What is the remedy for this sort of thing? you ask. Time, the great rectifier of all things, will attend to the Mr. Chauffeur of this particular stripe; he may be in the majority now, but before many days he will be in the minority. As soon as education and appreciation of the desirability of his position will attract good and reliable young men as applicants for it the day of the crooked chauffeur will have vanished. The chauffeur of the past and the one of the present have done much to disgust and discourage men with automobiles and in all this the chauffeur has been very aptly seconded by the purveyors of inferior second-hand and new machines. Thank goodness though, this crop of unreliable vehicles will soon be lost in the flood of new and reliable automobiles, which is now fairly under way. If the Automobile Manufacturers' Association takes up the task of warning the public not to buy machines that are known to be unreliable and the claims of whose makers cannot be redeemed, the association will be doing a great work since more prospective purchasers have been disheartened through unreliable machines, unreliable garage men and unreliable drivers than all other things combined.



AST winter a young man not unknown to fame, drove an automobile on the Ormond-Daytona Beach in 39 seconds. Some man present walked into the inn, which overlooks the course, and said to a gray-haired man who sat quietly smoking: "Mr. Flagler, Mr. Vanderbilt has just made a mile in 39 seconds, which is a world's record." "Is that so," returned Mr. Flagler. "Now, if he had only a sail on that machine he might have gone a little faster." Mr. Flagler was not interested in automobiles enough for anyone to notice it just at that time. For several days at Bretton Woods a week ago, I noticed this same Mr. Flagler jumping into an automobile, a White steamer, by the way, and with his wife and friends being whirled away over the mountain roads. The party was all dressed in the latest automobiling costumes, and I doubt if Henry M. Flagler ever enjoyed anything more than those same automobile trips in the White Mountains. Mr. Flagler is now talking automobile and report has it that he can be seen often in the Bretton Woods garage, studying the different types of machines there exhibited. I understand that an order, or rather orders, for the latest things in automobiles has been

given by Mr. Flagler and I would not be surprised to see him tackling a Vanderbilt on the famous course made accessible to us all solely through the enterprise and energy of Henry M. Flagler, of the Florida East Coast Beautiful.



N the beginning was the word, and I sometimes think there was also Charles I. Glidden. That man Glidden is a wonder as a self-advertiser. The first I heard of him he was at the Arctic Circle, where even there the frost was not thick enough to prevent his sending out around the world some beautiful hot-air stories. The next time I saw him, was on top of Mt. Washington. There I learned he would give a cup to the American Automobile Association, the fact being duly announced through a megaphone. How in the world he could get up to the mountain top I do not know, but there he was and ready for business. The next I hear of him, he is driving westward, ho! in an automobile, running on railroad tracks, and scaring the track repairers almost to death as he heads for the Pacific ocean. Now, this auto railwaying is a Glidden form of advertising that cannot be beat and he undoubtedly deserves credit for tackling the proposition. I believe it will become popular if it can be arranged to safely run automobiles in between slow and fast passenger trains.

Now, what is behind all this Glidden advertising? people are beginning to ask. The man is reputed to be worth millions and he is not to my mind a man of reckless expenditure. There is more about Mr. Glidden in the clippings than there is about all the other things appertaining to automo-

biles combined. It always seems to me that certain Boston people, including many members of the Massachusetts Automobile Club, smile when you ask them what Mr. Glidden's game is. Rumors of an American Napier Automobile Company of large capitalization have been heard, and from Mr. Glidden's clever financing of the past it is fair to predict that, when the importing bubble bursts, Mr. Glidden will not be holding the bag.

COME of the daily papers recently quoted a New York magistrate to the effect that the owner of the car guilty of illegal speeding should be made to suffer instead of his employee, the driver. In discussing this opinion, Winthrop E. Scarritt, President of the Automobile Club of America, with his usual facility for putting things the way he thinks right even if his views are not always popular, declares that he sympathizes with and approves of the plan of calling the owner of an automobile to account rather than the driver who is under the control of the employer. "Of course," said Mr. Scarritt, in talking to me about the matter recently, "some of my club members have disagreed with me, but I believe that the opinion expressed by the magistrate is the correct one and being so I have no hesitation in supporting that opinion. It is only reasonable to suppose that the driver of no vehicle will drive it any faster than the law allows, unless the employer who sits at his side is willing that he should do so, therefore the employer is an accessory to the illegal speeding and should be the one made to suffer rather than the man whom he employs and to whom he pays a weekly wage."

I think all reasonable people will support President Scarritt in these views, while I am sure that the public will applaud the views, their expression and their expresser, and after all the public opinion in this, as in everything else, is worth more than the opinions of a few selfish automobile owners.

TO Mr. A. T. Merrick, whose work in connection with automobiling is now so widely known, is the Auto-MOBILE MAGAZINE indebted for a new cover design wherein art and advertising have each been given their full due without favoritism having been shown to either. It has been the boast of its publishers that the front cover of the AUTOMOBILE MAGAZINE was not for sale, but boasts often fail when they are brought face to face with facts; the facts are in evidence upon the front page of this issue; the boasts-well, no matter. When the Worthington Automobile Company declared they wanted the cover of the AUTOMOBILE MAGAZINE upon which to announce to automobilists the coming of the Meteor, the declaration seemed to be something which the publishers could not consider; but in the end they did, and considering, they accepted the Worthington idea of how the cover could be improved. Mr. Merrick has left the earth for the subjects of his illustration, and has taken us to the mid-heavens, where he shows us Jupiter, surrounded by his satellites, presenting to Mercury, his messenger and god of the streets, a substitute for the latter's wings, which were all good enough for transport purposes until the automobile came along and offered something superior. The idea is an original one and in making use of it for the Worthington people Mr. Merrick has made a distinct departure from the common place in the advertising of automobiles.

SOME way or another I seem to be regarded by no inconsiderable portion of the automobile confraternity. as a good thing on which to try out experiments. The consequence of this belief is that when a man gets what he thinks is a brand new idea he shoots it in at me and watches the effect. Of course, this is a compliment in a way, but like all compliments it suffers from a too frequent repetition and so sometimes I wish my complimentors would temporarily at least forget me in their search for a subject on which to study the effects of their ideas. came a package to me recently and in it was the cunningest little vest-pocket sized volume, all red and gold in binding, you ever saw. On the cover was embossed "How to Become a Competent Motor Car Driver." The author was sure he and his production were both the real things, for his letter was most laconic. "What do you think of this?" was all he wrote. Seeing as he has asked me, I'll reply, though I am afraid I will not dare to follow his example and see how terse I can state my opinion for fear I might get it down to a single word and that not a complimentary one. In the field this, the latest example of the howto literature, seeks to cover I will admit it describes very clearly the various types of car-propelling devices in use, tells how to control them in starting, stopping, and running at varying rates of speed, and ends with a brief catechism of questions the answers to which are supposed to tell the auto man what to do in all kinds of what may be called technical emergencies.

No doubt all of this is extremely useful. The driver of a motor car should perfectly understand his vehicle and have it at all times under control, but that having learned this he will thereupon find himself a "competent motor car driver" is a hope which is destined to disappointment.

Assuming the reader of the book to

be quite familiar with all of the vehicle's propelling machinery and able to pass a satisfactory examination as to every detail thereof, he still needs to know many things and requires more than ordinary skill in the doing of them. This prompts me to supplement the manual sent me with a few practical suggestions which are the outgrowth rather of observation than of experience.

(1) Keep one hand on the steering and the other on the lever. Each may have to be thrown into action very quickly, by moving them in opposite directions. If nature has not endowed you with a double-barreled mind, you would do well to spend as much as possible of your time off duty in learning to describe circles in the air with both hands simultaneously, turning them in opposite directions. This will be good exercise and have the incidental advantage of entertaining the children.

- (2) Both feet must be kept free of other engagements to actuate the levers placed beneath them. Practice in the waltz step will be useful in giving the elasticity and flexibility to the ankle which rapid and continuous pedal action demands. If about to become expert is grateful for mercies enjoyed and blessings received, some part of his leisure may be employed in giving thanks that he lacks the equipment of a prehensile tail, or something would be found by the clever designers for that to do which would further subdivide the driver's attention.
- (3) Do not deem it part of an auto driver's duty to maintain a flirtation with an attractive young woman if she chances to be seated in the tonneau of the car. There is no great harm in that in itself considered, but it is distracting and you have enough to attend to without it.
- (4) It is not wise to see how near you can come to an obstructing or crossing

vehicle without hitting it, Your judgment of distances and relative speeds may not be inerrant. Of course you should have a clear right of way, but this is not always possible, and taking the chances of facilitating the clearing of it by impact when obstructed is expensive. It may cost you your job, your liberty and your wad.

(5) If you find it necessary to swear at other drivers, do so in an undertone. It will have just as much value and the travelers with you will be better pleased. To look straight ahead produces less responsibility than to keep an eye on the tonneau end of the car to make sure that your passengers are thoroughly appreciative of your ability.

(6) In the matter of leisurely pedestrians you must, of course, use your discretion. That they should scamper for safety when they hear your horn goes without saying. If they don'twell, deal as gently with the erring as possible. Perhaps they don't know any better than to cross a street when the car of a book-learned chauffeur is in sight. Be patient toward all men-and women; especially toward cripples, old people, and heedless children. If you could teach them anything by running them down and pulverizing them, it would be different. As the rule, however, to be struck by an automobile is provocative, but it is not educational. Those to whom it happens rarely learn anything from it of future use to them or others.

These suggestions of mine might be continued indefinitely. They merely serve to show how incomplete is a manual of motoring which deals exclusively with mechanism and not with men. But what's the use? The author he will think I'm just using his work to fill space with here, while the man who is going to buy it will never see this.

THE SENATOR.